Heavy Industrial Panel Solution

IEI offers complete robust panel solutions for harsh industrial environments. The product portfolio varies from sizes and performance. To catch the wave of cloud computing and intelligent solutions, IEI introduces the iRIS remote management solution to enhance efficiency for system integration. With all these benefits, IEI is your solid solution for industrial computing.

Industrial Automation

Heavy Industrial Panel PC Solutions

New

PPC-F Series

Flat Screen Industrial Panel PC

- iRIS Remote Intelligent Solution
- Multi-touch
- Dual PCIe Mini Card Expansion

PPC-37 Series

Fanless & Compact Industrial Panel PC

- Slim Size with Intel® N270 Solution
- Fanless Intel® Atom™ N2600 Solution

PPC-51 Series

PCI/PCIe Expansion Industrial Panel PC

- Performance Oriented Multi-functional Panel PC with Intel® H61 Solution
- Expandable Function through PCI/PCIe x1 Expansion Slot

WIDS Series

Wireless Industrial Panel PC

- Invisible Wi-Fi Antenna Utilizes Efficient Antenna Type
- High Performance with Quad-core CPU and DDR3 Memory

Heavy Industrial Panel PC								
Size	**8.4”**	**10.4”**	**12.1”**	**15”**	**17”**	**19”**	**22”**	**24”**
Intel® Celeron® J1900			PPC-F12A-J19	PPC-F15B-J19	PPC-F17B-J19			
Intel® Atom™ N2600	PPC-3708A-N26	PPC-3710A-N26	PPC-3712A-N26					
Intel® Atom™ D525			PPC-5152-D525					
Intel® Atom™ N270	PPC-3708A-N270	PPC-3710A-N270	PPC-3712A-N270					
Intel® H81				PPC-F15A(D)-H81	PPC-F17A(D)-H81		PPC-F22A(D)-H81	PPC-F24A(D)-H81
Intel® H61				PPC-5150A(D)-H61 WIDS-515A(D)-H61	PPC-5170A(D)-H61 WIDS-517A(D)-H61	PPC-5190A(D)-H61		

Fully Ruggedized Panel PC Solutions

Marine Panel PC Series

New

S19/S24

- iRIS Remote Intelligent Soultion
- Intel® QM87 Fanless Solution

S12A

- Rugged Fanless Panel PC with Intel® Atom™ Processor
- IP67 Fully-Enclosed Design

Fully IP65 Panel PC Series

UPC Series

- Rugged Aluminum Die-casting Body
- Redundant Dual DC Power Input

Fully Ruggedized Panel PC				
Size	**12.1”**	**15”**	**19”**	**24”**
Intel® Atom™ N270	S12A(SR)			
Intel® Atom™ D525	UPC-V312			
Intel® NM70		UPC-V315		
Intel® QM77		UPC-V315		
Intel® QM87			S19A	S24A

Heavy Industrial Monitor Solutions

New

DM-F Series
Flat Screen Industrial Monitor

DM Series
Industrial Monitor

TDM Series
Wide Temperature Monitor

SRM Series
Sunlight Readable Monitor

LCD-KIT Series
Open Frame Display Module

Robot-TP-65M
Robot Teaching Pendant

Heavy Industrial Monitor									
Size	**6.5”**	**8.4”**	**10.4”**	**12.1”**	**15”**	**17”**	**19”**	**22”**	**24”**
DM-F				DM-F12A	DM-F15A	DM-F17A		DM-F22A	DM-F24A
DM	DM-65GHS	DM-84GHS	DM-104GHS	DM-121GXS	DM-150GS	DM-170GS	DM-190GS		
TDM				TDM-121GMS	TDM-150GS				
SRM				SRM-121XA	SRM-150GS				
LCD-KIT	LCD-KIT65GH	LCD-KIT84GH	LCD-KIT104GH	LCD-KIT121GX	LCD-KIT150G	LCD-KIT170GS			
Teaching Pendant	Robot-TP-65M								

State of the Art Industrial Panel Solution

New

DM-F Industrial Monitor Series
PPC-F Industrial Panel PC Series

IEI dedicates to develop impeccable industrial panel products. The DM-F and PPC-F series industrial monitor and panel PC not only keep rugged design of IP65 protection but also enrich aesthetic experience by implementing the seamless mounting method. The projected capacitive touch option is added to these new series of products to provide up to 10 points multi-touch solution!

PPC-F H81 Industrial Panel PC 15”~24”

DM-F Industrial Monitor 12”~24”

Heavy Industrial Panel Solution Market Focus

DM-F and PPC-F heavy duty monitor and panel PC dedicate to industrial panel solution, aiming at operating in harsh environment applications, long term support, and multiple device remote management solutions.

Industrial Automation

Industrial Machinery

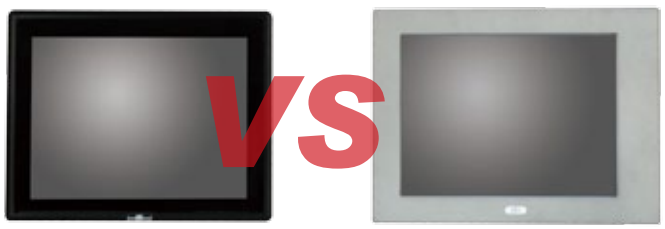
Control Terminal

Field Maintenance

1 IEIMobile Solutions
2 Automation Panel Solutions
3 PACSmate Medical Solutions
4 Optional Peripherals

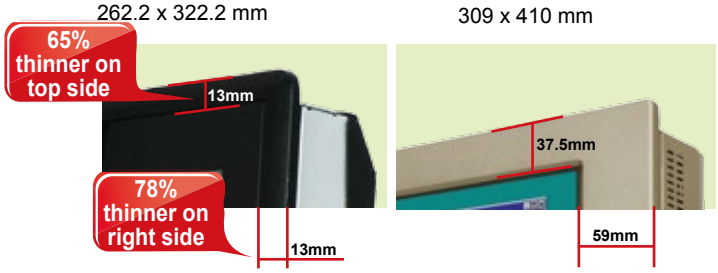
■ Thinner, Lighter, Prettier

DM-F & PPC-F aim at slim and compact design; therefore, these new series make a huge improvement in mechanical design to achieve the goal.



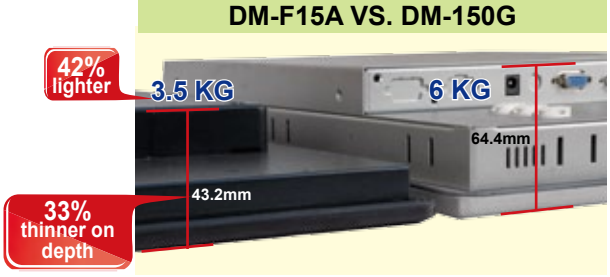
PPC-F15A-H81
262.2 x 322.2 mm

PPC-5150A-H61
309 x 410 mm



PPC-F15A-H81 VS. PPC-5150A-H61

DM-F15A VS. DM-150G



■ 8mm Ultra Thin Bezel Design

To enhance aesthetic experience in industrial automation applications, the depth of the front bezel of the DM-F and PPC-F is only 8mm to minimize the gap between the wall and the system in wall panel mounting, which is neat and simple during integration.

■ New Panel Mount Screw Design

The DM-F & PPC-F series is shipped with the new panel mount screws allowing users to fasten either with screwdrivers or hands.

Outdoor HMI

Digital Signage

Payment Collection

Interactive Kiosk

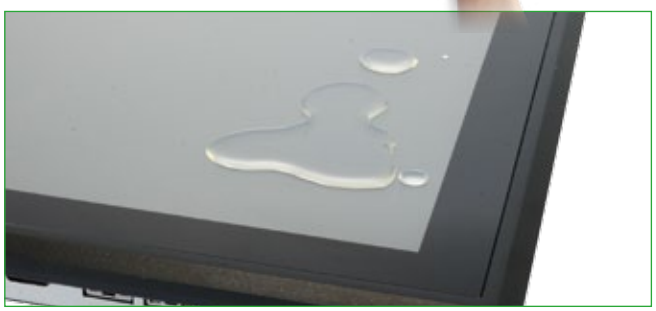
■ 10 Points Multi-touch

DM-F24A and PPC-F24A supports 10-points multitouch projected capacitive, enhancing smooth operations! IEI provides 12” to 17” resistive single type and projected capacitive type touchscreen options to enrich simple and intuitive user experience.

■ Impeccable Front Panel

7H Anti-scratch Touch

DM-F and PPC-F projected capacitive touch version uses 7H hardness vandal proof strengthened glass, preventing damages from physical impact.



Front Bezel IP65 Protection

Design for harsh environments, DM-F and PPC-F provides front bezel IP65 protection to resist dust and water jet.

Intelligent Industrial Panel PC

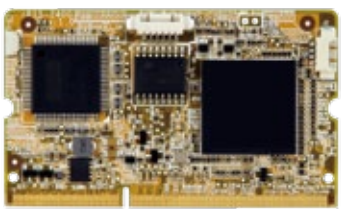
PPC-F Series

IPMI 2.0 Compliant

5 YEARS 5-YEAR SUPPLY GUARANTEE

IEI Remote Intelligent Management System

The PPC-F supports iEi iRIS remote management, which helps users to manage multiple devices through single management interface and elevates work efficiency. iRIS solution only requires a module and Internet connection!



iRIS solution

+ Network +

QNAP NAS

→ Complete IoT Solution!

■ Remote Power Management

Users can remotely power on/off all the iRIS devices and set up power cycle to simplify power control process.

ON OFF **Unify industrial automation process through a simple setting!**

■ 24-hour Active Recovery

Remote troubleshooting everywhere, there is no need to send out maintenance staff anymore!

Save labor cost & improve efficiency!

Automatic Error Alert

System sends alert by email/ SMS to designated members when error happens

Video Streaming and Record

Real-time record main screen video for trouble diagnosis

Remote Troubleshooting

Maintainers can troubleshoot the error through remote KVM

Minimize downtime and improve service quality for kiosk and ticket machine applications!

Latest Intel® Cost Effective Mainstream H81 Platform

■ Platform Transition

45nm Process Technology	32nm Process Technology	22nm Process Technology		
Nehalem	**Westmere**	**Sandy Bridge**	**Ivy Bridge**	**Haswell**
4 series Intel® Core™ Microarchitecture	5 series Intel® Core™ Microarchitecture	6 series Intel® Core™ Microarchitecture	7 series Intel® Core™ Microarchitecture	8 series 2013 NEW Intel® Microarchitecture
TOCK	TICK	TOCK	TICK	TOCK

4th Generation Intel® Core™ Processor Family:
Latest microarchitecture with
exciting performance on
Intel's 22nm process technology

■ Major Advantage of PPC-F H81 Platform

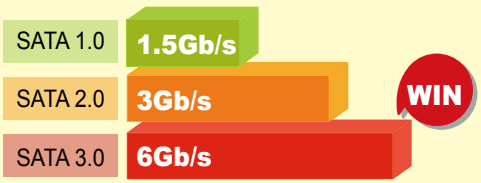
More Embedded CPU Choice

IEI selects more embedded CPUs in Haswell generation, including 35W/45W/54W/65W for the PPC-F H81 platform. It is more flexible to choose suitable CPU for different system requirements.

2.5" SATA 3.0 HDD/SSD

SATA 3.0 support

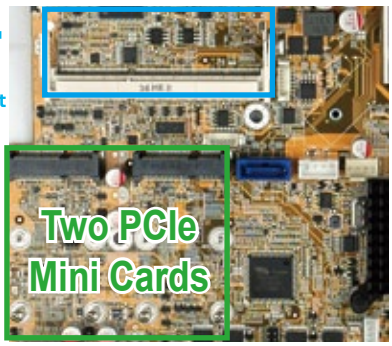
The PPC-F series equips with the latest SATA 3.0 interface that supports bandwidth up to 6Gb/s which is twice faster than SATA 2.0! Both 2.5" SATA HDD and SSD can be used in the SATA 3.0 interface.



■ PCIe Mini Card Expansion

Two full-size PCIe Mini card expansion slots are reserved in the PPC-F 2. With a wide variety of IEI PCIe Mini card solutions, it is flexible and easy to add extra functions on the system.

IPMI 2.0 Compliant



WIFI-RT5392-SB-R10
WIFI-RT3593-DB-R10

MPCIE-LAN-R10

MPCIE-3G-R10

MPCIE-USB3-R10

IVCME-C604

■ FHD Industrial Panel PC Available

Going big is the market trend on industrial panel PC and monitor products. Thus, IEIlaunches new PPC-F series industrial panel PC along with DM-F monitor series. Users can enjoy high quality graphics and enriched data display at the same time from FHD panels.

PPC-F Series 12”~24” PPC-F Selection Guide

LCD Size		12”	15”	15”	17”	17”	22”	24”
Model		PPC-F15A-J19	PPC-F15A-H81	PPC-F15B-J19	PPC-F17A-H81	PPC-F17B-J19	PPC-F22A-H81	PPC-F24A-H81
Display	LCD Size	12”	15”	15”	17”	17”	22”	24”
	Max Resolution	1024(W) x 768(H)	1024(W) x 768(H)	1024(W) x 768(H)	1280(W) x 1024(H)	1280(W) x 1024(H)	1920(W) x 1080(H)	1920(W) x 1080(H)
	Brightness (cd/m²)	600	400	400	350	350	250	250
	Contrast Ratio	700 : 1	700 : 1	700 : 1	1000 : 1	1000 : 1	1000 : 1	3000 : 1
	LCD Color	16.2M	16.2M	16.2M	16.7M	16.7M	16.7M	16.7M
	Pixel Pitch (mm) (HxV)	0.24 x 0.24	0.29mm x 0.29mm	0.29mm x 0.29mm	0.26mm x 0.26mm	0.26mm x 0.26mm	0.25mm x 0.25mm	0.28mm x 0.28mm
	Viewing Angle (V/H)	160° / 140°	160° / 140°	160° / 140°	170° / 160°	170° / 160°	165° / 165°	178° / 178°
	Backlight MTBF (hrs)	50000					30000	30000
Touch	Touch Screen	Resistive type 5-wire single touch window Projected capacitive 2-point touch window					Projected capacitive 2-point touch window	Projected capacitive 10-point touch window
	Touch Controller	Penmount 6000 EETI EXC7200					EETI EXC7200	EETI EXC3000
Motherboard	CPU	Intel® Celeron® Quad-core J1900 SoC 2GHz	4th Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor	Intel® Celeron® Quad-core J1900 SoC 2GHz	4th Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor	Intel® Celeron® Quad-core J1900 SoC 2GHz	4th Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor	4th Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor
	Chipset	N/A	Intel® H81	N/A	Intel® H81	N/A	Intel® H81	Intel® H81
	RAM	2 x 204-pin 1066/1333 DDR3L SO-DIMM supported (Max. 8GB)	2 x 204-pin DDR3 SO-DIMM slots (Max. 16GB)	2 x 204-pin 1066/1333 DDR3L SO-DIMM supported (Max. 8GB)	2 x 204-pin DDR3 SO-DIMM slots (Max. 16GB)	2 x 204-pin 1066/1333 DDR3L SO-DIMM supported (Max. 8GB)	2 x 204-pin DDR3 SO-DIMM slots (Max. 16GB)	2 x 204-pin DDR3 SO-DIMM slots (Max. 16GB)
	Ethernet	1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I211 controller	1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I217 controller	1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I211 controller	1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I217 controller	1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I211 controller	1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I217 controller	1 x PCIe GbE by Intel® I210 controller 1 x PCIe GbE by Intel® I217 controller
	Audio Codec	Realtek ALC662 HD codec						
I/O Ports and Switches		2 x RJ-45 LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x DC Jack (4pin) 1 x terminal block 1 x mic & speaker 1 x power switch	2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI 4 x RS-232 1 x RS-422/485 1 x VGA 1 x AC/DC power plug 1 x AT / ATX Switch 1 x Clear CMOS 1 x Reset Button 1 x Power Switch	2 x RJ-45 LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x DC Jack (4pin) 1 x terminal block 1 x mic & speaker 1 x power switch	2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI 4 x RS-232 1 x RS-422/485 1 x VGA 1 x AC/DC power plug 1 x AT / ATX Switch 1 x Clear CMOS 1 x Reset Button 1 x Power Switch	2 x RJ-45 LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x DC Jack (4pin) 1 x terminal block 1 x mic & speaker 1 x power switch	2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI 4 x RS-232 1 x RS-422/485 1 x VGA 1 x AC/DC power plug 1 x AT / ATX Switch 1 x Clear CMOS 1 x Reset Button 1 x Power Switch	2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI 4 x RS-232 1 x RS-422/485 1 x VGA 1 x AC/DC power plug 1 x AT / ATX Switch 1 x Clear CMOS 1 x Reset Button 1 x Power Switch
Drive Bay	HDD Driver Bay	1 x 2.5 SATA HDD bay with anti-shook					1 x 2.5 SATA HDD bay with anti-shook or 1 x 3.5 SATA HDD bay with anti-shook	
	SSD	1 x mSATA 2.0						
Expansion Slot		1 x full-size PCIe mini card 1 x full-size PCIe mini card co-lay mSATA (SATA2)						
System Cooling		Fanless	Active with Fan	Fanless	Active with Fan	Fanless	Active with Fan	Active with Fan
Environment	Operating Temperature	-10°C~50°C						
	Storage Temperature	-20°C~60°C						

PPC-F H81 Series

New

Intelligent Industrial Panel PC

- Support iRIS-2400 IEI remote intelligent solution
- Scalable Intel® H81 chipset supports LGA1150 Intel® 4th generation Core™ i7/i5/i3, Pentium® or Celeron® processor with up to 65W TDP
- Robust IP65 aluminum front bezel
- Aesthetic ultra-thin bezel for seamless panel mount installation
- Projected capacitive multi-touch/ resistive single touch options
- Dual full-size PCIe Mini card expansion
- AC/ DC power input options

IPMI 2.0 Compliant | FHD | Multi-touch | IP65 | PCIe Mini | USB 3.0 | MOUNT

Specifications

Model		PPC-F15A	PPC-F17A	PPC-F22A	PPC-F24A
LCD	LCD Display	15" (4:3)	17" (5:4)	21.5" (16:9)	24" (16:9)
	Max Resolution	1024(W) x 768(H)	1280(W) x 1024(H)	1920(W) x 1080(H)	1920(W) x 1080(H)
	Brightness (cd/m²)	400	350	250	250
	Contrast Ratio	700 : 1	1000 : 1	1000 : 1	3000 : 1
	LCD Color	16.2M	16.7M	16.7M	16.7M
	Pixel Pitch (mm)	0.29 x 0.29	0.26 x 0.26	0.25 x 0.25	0.28 x 0.28
	Viewing Angle (H-V)	160°/ 140°	170° / 160°	170° / 160°	178°/178°
	Backlight MTBF (Hrs)	50000	50000	30000	30000
Motherboard	SBC Model	FPPCMB-H81-R10			
	CPU	LGA1150 Intel® 4th generation Core™ i7/i5/i3/Pentium®/Celeron® processor up to TDP 65W			
	Chipset	Intel® H81			
	RAM	Support 2 x 204-pin DDR3 SO-DIMM slot (max. 16G)			
Touch	Touchscreen & Controller	Resistive type 5-wire single touch window/ Penmount 6000 Projected capacitive 2-point touch window/ EETI EXC7200		Projected capacitive 2-point touch window/ EETI EXC7200	Projected capacitive 10-point touch window/ EETI EXC3000
Input Interfaces	I/O Ports & Switch	2 x RJ-45 LAN Port 2 x USB 3.0 4 x USB 2.0 1 x HDMI 4 x RS-232 1 x RS-422/485 1 x VGA 1 x AC/DC power plug 1 x AT / ATX Switch 1 x Clear CMOS 1 x Reset Button 1 x Power Switch			
	Expansion	1 x full size PCIe mini Card 1 x full size PCIe mini Card colay mSATA [SATA2 only]			
Drive Bay		1 x 2.5" HDD/SSD drive bay		1 x 2.5" HDD/SSD drive bay or 1 x 3.5" HDD/SSD drive bay	
iRIS Remote Management Solution		iRIS-2400 slot			
Physical	Construction Material	Aluminum front cover and sheet metal rear cover			
	Mounting	Panel Mount/ Rack Mount/ 100*100 VESA Mount		Panel Mount/ 100*100 VESA Mount	
	Enclosure Color	Black C			
	Dimension (mm)	303 x 378.5 x 43.2	341.4 x 408.4 x 49.3	350.4 x 550.4 x 49.1	382 x 600 x 49.4
	Cutout Dimensions (mm)	284.6 x 368.1	323 x 398	340 x 532	358.6 x 578.6
	Net/ Gross Weight (Kg)	5.6/ 8.3	7.5/10.7	10.1/14.4	10.5/14.8
Environment	Operating Temperature (with air flow)	-10°C ~ 50°C			
	Storage Temperature	-20°C ~ 60°C			
	Humidity	10% to 95% (non-condensing)			
	IP Level	Front IP 65			
	Safety and EMC	CE & FCC certified			
Power Supply	AC Input	AC Input ATX Power Supply - P/N: ACE-A622A-RS - 220W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A			
	DC Input	DC Input ATX Power Supply - P/N: ACE-4520C-RS - 200W Power Supply - Input: 24VDC, 50/60Hz - Output(max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A			

Ordering Information

Part Number		Description
15”	PPC–F15AA–H81i-P/4G/R-R10	15” 400 cd/m² XGA Panel PC with Intel® H81 chipset, Pentium Dual Core G3220 Processor (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, resistive touch window, R10
	PPC–F15AA–H81i-i3/4G/R-R10	15” 400 cd/m² XGA Panel PC with Intel® H81 chipset, Core™ i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, resistive touch window, R10
	PPC–F15AA–H81i-i5/4G/R-R10	15” 400 cd/m² XGA Panel PC with Intel® H81 chipset, Core™ i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, resistive touch window, R10
	PPC–F15AA–H81i-P/4G/PC-R10	15” 400 cd/m² XGA Panel PC with Intel® H81 chipset, Pentium Dual Core G3220 Processor (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10
	PPC–F15AA–H81i-i3/4G/PC-R10	15” 400 cd/m² XGA Panel PC with Intel® H81 chipset, Core™ i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10
	PPC–F15AA–H81i-i5/4G/PC-R10	15” 400 cd/m² XGA Panel PC with Intel® H81 chipset, Core™ i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10
17”	PPC–F17AA–H81i-P/4G/R-R10	17” 350 cd/m² SXGA Panel PC with Intel® H81 chipset, Pentium Dual Core G3220 Processor (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, resistive touch window, R10
	PPC–F17AA–H81i-i3/4G/R-R10	17” 350 cd/m² SXGA Panel PC with Intel® H81 chipset, Core™ i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, resistive touch window, R10
	PPC–F17AA–H81i-i5/4G/R-R10	17” 350 cd/m² SXGA Panel PC with Intel® H81 chipset, Core™ i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, resistive touch window, R10
	PPC–F17AA–H81i-P/4G/PC-R10	17” 350 cd/m² SXGA Panel PC with Intel® H81 chipset, Pentium Dual Core G3220 Processor (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10
	PPC–F17AA–H81i-i3/4G/PC-R10	17” 350 cd/m² SXGA Panel PC with Intel® H81 chipset, Core™ i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10
	PPC–F17AA–H81i-i5/4G/PC-R10	17” 350 cd/m² SXGA Panel PC with Intel® H81 chipset, Core™ i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10
21.5”	PPC–F22AA–H81i-P/4G/PC-R10	21.5” 250 cd/m² FHD Panel PC with Intel® H81 chipset, Pentium Dual Core G3220 Processor (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10
	PPC–F22AA–H81i-i3/4G/PC-R10	21.5” 250 cd/m² FHD Panel PC with Intel® H81 chipset, Core™ i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10
	PPC–F22AA–H81i-i5/4G/PC-R10	21.5” 250 cd/m² FHD Panel PC with Intel® H81 chipset, Core™ i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10
24”	PPC–F24AA–H81i-P/4G/PC-R10	24” 250 cd/m² FHD Panel PC with Intel® H81 chipset, Pentium Dual Core G3220 Processor (3M Cache, 3.00 GHz), TDP 53W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10
	PPC–F24AA–H81i-i3/4G/PC-R10	24” 250 cd/m² FHD Panel PC with Intel® H81 chipset, Core™ i3 Dual Core i3-4330 Processor (4M Cache, 3.50 GHz), TDP 54W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10
	PPC–F24AA–H81i-i5/4G/PC-R10	24” 250 cd/m² FHD Panel PC with Intel® H81 chipset, Core™ i5 Quad Core i5-4570S Processor (6M Cache, up to 3.60 GHz), TDP 65W, 2GB RAM*2, support iRIS-2400, black color, PSU ACE-A622A, projective capacitive touch window, R10

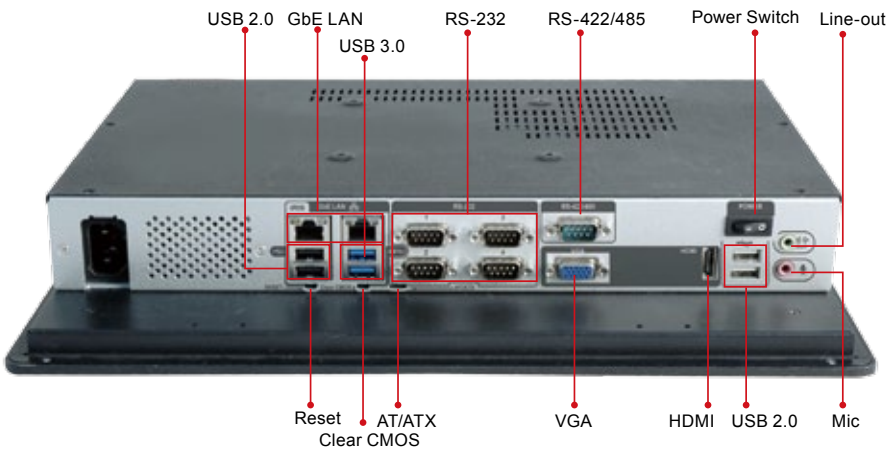
* DC power supply SKU, please contact IEI sales team.

Options

Item	PPC-F15A	PPC-F17A	PPC-F22A	PPC-F24A
ARM	ARM-31	ARM-31	ARM-31	ARM-31
Stand	STAND-A19 STAND-B19	STAND-C19 STAND-A26	STAND-C19 STAND-A26	STAND-C19 STAND-A26
Wall Mount Kit	WK-190MS-R10			
Panel Mount Kit	FPK-04-R10		FPK-05-R10	FPK-06-R10
Rack Mount Kit	FRK15-R10	FRK17-R10	N/A	
WiFi Kit	PPC-WL-KIT02-R10		PPC-WL-KIT03-R10	

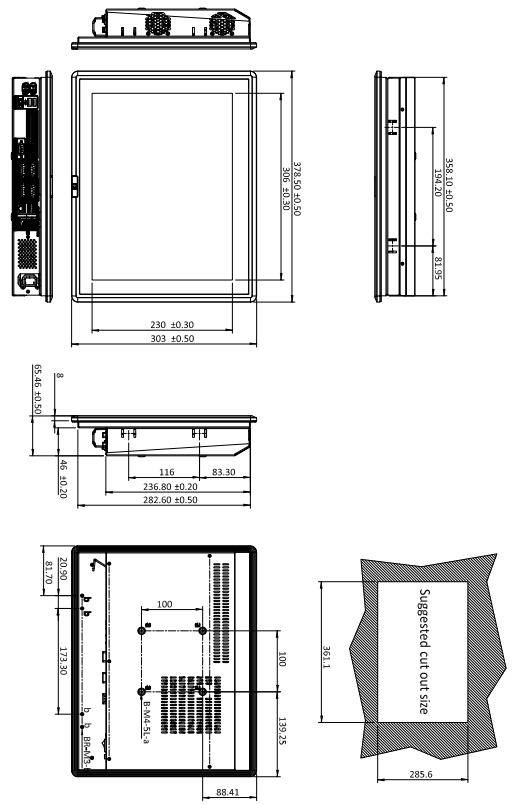
Packing List

Item	Q’ty	Remark
Driver CD	1	
One Key Recovery CD	1	
Touch Pen	1	Resistive touch only
Power Cord	1	Depends on shipping region
Screw Kit	1	



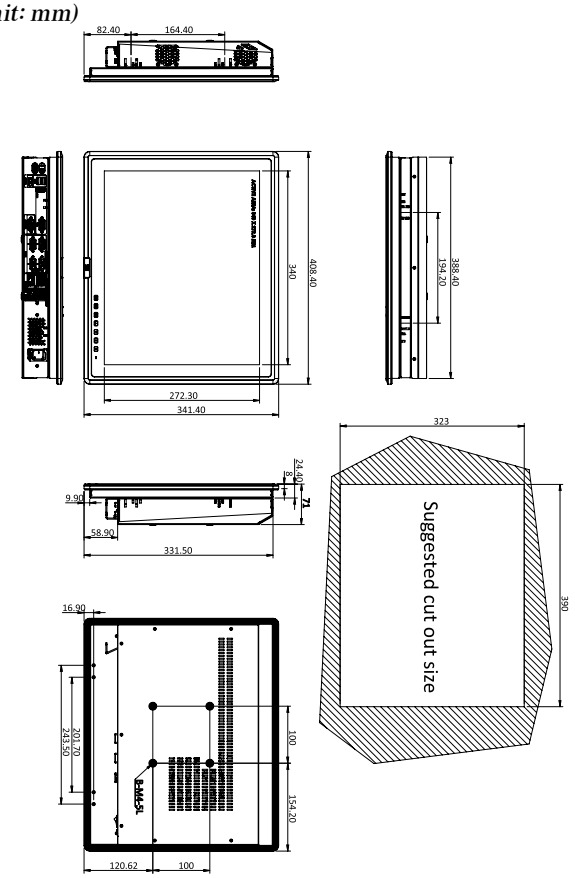
PPC-F15A Dimensions

(Unit: mm)



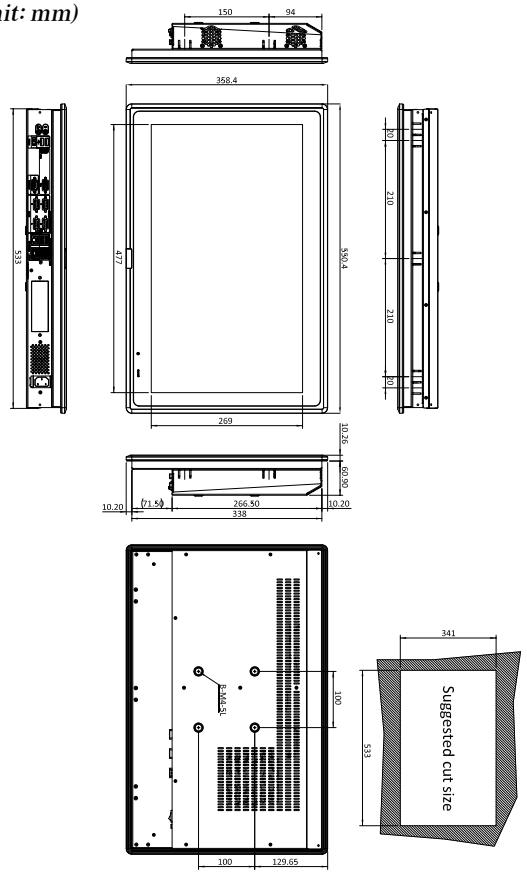
PPC-F17A Dimensions

(Unit: mm)



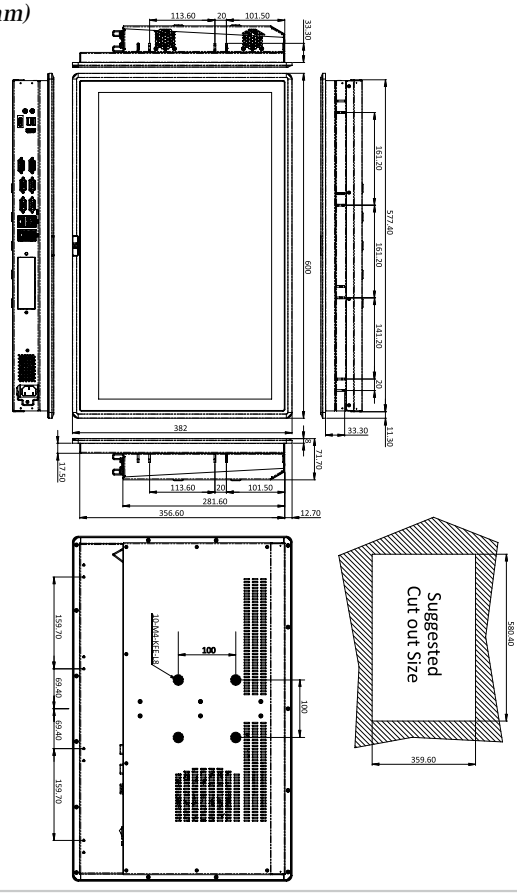
PPC-F22A Dimensions

(Unit: mm)



PPC-F24A Dimensions

(Unit: mm)



PPC-F Bay Trail Fanless Series

New

Intelligent Industrial Panel PC

PRELIMINARY

- Support iRIS-2400 IEI remote intelligent solution
- Intel® Celeron® Quad-core J1900 SoC
- Robust IP65 aluminum front bezel
- Aesthetic ultra-thin bezel for seamless panel mount installation
- Projected capacitive multi-touch/ resistive single touch options
- Dual full-size PCIe Mini card expansion
- 9-36V DC wide range DC input

iRIS™ IPMI 2.0 Compliant | Multi-touch | IP65 | PCIe Mini | USB 3.0 | MOUNT

Specifications

Model		PPC-F12A	PPC-F15B	PPC-F17B
LCD	LCD Display	12" (4:3)	15" (4:3)	17" (5:4)
	Max Resolution	1024(W) x 768(H)	1024(W) x 768(H)	1280(W) x 1024(H)
	Brightness (cd/m²)	600	400	350
	Contrast Ratio	700 : 1	700 : 1	1000 : 1
	LCD Color	16.2M	16.2M	16.7M
	Pixel Pitch (mm)	0.24 x 0.24mm	0.29 x 0.29	0.26 x 0.26
	Viewing Angle (H-V)	160° / 140°	160° / 140°	170° / 160°
	Backlight MTBF (Hrs)	50000	50000	50000
Motherboard	SBC Model	PPCFMB-BT-R10		
	CPU	Intel® Celeron® Quad-core J1900 on-board SoC 2GHz		
	RAM	Support 2 x 204-pin DDR3L SO-DIMM slot (max. 8G)		
Touch	Touchscreen & Controller	Resistive type 5-wire single touch window/ Penmount 6000 Projected capacitive 2-point touch window/ EETI EXC7200		
Input Interfaces	I/O Ports & Switch	2 x RJ-45 LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 2 x RS-232 1 x RS-232/422/485 1 x VGA 1 x DC Jack (4pin) 1 x terminal block 1 x mic & speaker 1 x power switch		
	Expansion	1 x full size PCIe mini Card 1 x full size PCIe mini Card colay mSATA [SATA2 only]		
Drive Bay		1 x 2.5" HDD/SSD drive bay		
iRIS Remote Management Solution		iRIS-2400 slot		
Physical	Construction Material	Aluminum front cover and sheet metal rear cover		
	Mounting	Panel Mount/ Rack Mount/ 100*100 VESA Mount		
	Enclosure Color	Black C		
	Dimension (mm)	262.2 x 322.2 x 40.5	303 x 378.5 x 43.2	341.4 x 408.4 x 49.3
	Cutout Dimensions (mm)	234.8 x 303.8	284.6 x 368.1	323 x 398
Environment	Operating Temperature (with air flow)	-10°C ~ 50°C		
	Storage Temperature	-20°C ~ 60°C		
	Humidity	10% to 95% (non-condensing)		
	IP Level	Front IP 65		
	Safety and EMC	CE & FCC certified		
Power Input		9 - 36 V DC		

Heavy Industrial PPC Series

■ Robust Product Design

IP Protection Improvement

The PPC series is equipped with robust front panel for water protection and tightly front assembly against the component from any direction.

IP Code Table

The IP Code (International Protection Rating) consists of the letters IP followed by two digits.

Solids		Liquids	
First Numerical		Second Numerical	
No Protection	0	0	No Protection
Objects Greater than 50mm	1	1	Vertically Dripping Water
Objects Greater than 12mm	2	2	75o-90o Sprayed water
Objects Greater than 2.5mm	3	3	30o-90o Sprayed water
Objects Greater than 1.0mm	4	4	Water sprayed-low pressure
Dust-Protected	5	5	Water jets-low pressure
Dust-Tight	6	6	Water jets-high pressure
IP 66 Compliant!		7	Temporary immersion
		8	Indefinite Immersion

■ Wide Temperature Range (-20°c~60°c)

The PPC-5150A-H61/ PPC-5170A-H61 and UPC-V315 supports wide operating temperature, surviving from any kinds of harsh environment.

■ High Efficiency Transmission

SFP Fiber LAN

The small form-factor pluggable transceiver (SFP) is a compact, hot-pluggable transceiver used for both telecommunication and data communication applications.

- Immunity to electromagnetic interference
- High electrical resistance
- No sparks
- Long transmission distance – up to 2 km (multi-mode)/ 120 km(single-mode)

Transmission distance

Type	Core diameter	Wavelength (nm)	Cost	Max Distance (km)
Single-Mode	8 to 10	1310 or 1550	More expensive	120 ★
Multi-Mode	50 or 62.5	850 or 1300	Medium	2
RJ-45	N/A	N/A	Cheaper	0.1

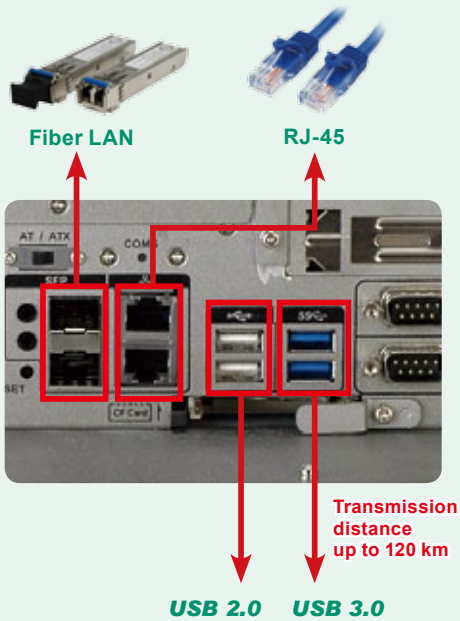
USB 3.0 – Faster Data Transmission

USB 3.0 has higher transmission speed and wider data bandwidth. Support faster transferring for the user.

USB Version	USB 1.0	USB 2.0	USB 3.0
Data Transfer Rate)	*12Mbps*	*480Mbps*	*5Gbps* ★
Media (Data Size)	Transfer Time		
Song / Pic (4 MB)	5.3 sec	0.1 sec	0.01 sec
HD-Movie (25GB)	9.3 hr	13.9 min	70 sec

Multiple choices

We provide two transmission LAN types for choice, either 2 × Fiber LAN or 2 × RJ-45.



PPC Series 8.4”~12.1” PPC Selection Guide

LCD Size		8.4”		10.4"		12.1”	
Model		PPC-3708A-N26	PPC-3708A-N270	PPC-3710A-N26	PPC-3710A-N270	PPC-3712A-N26	PPC-3712A-N270
Display	**LCD Size**	**8.4 "**	**8.4 "**	**10.4 "**	**10.4 "**	**12.1 "**	**12.1 "**
	Max Resolution	800(W) x 600(H)	800(W) x 600(H)	800(W) x 600(H)	800(W) x 600(H)	1024(W) x 768(H)	1024(W) x 768(H)
	Brightness (cd/m²)	450	450	400	400	500	500
	Contrast Ratio	600:1	600:1	700:1	700:1	700:1	700:1
	LCD Color	262K	262K	262K	262K	262K	262K
	Pixel Pitch (mm) (HxV)	0.213(H) x 0.213(V)	0.213(H) x 0.213(V)	0.264(H) x 0.264(V)	0.264(H) x 0.264(V)	0.3075(H) x 0.3075(V)	0.3075(H) x 0.3075(V)
	Viewing Angle (V/H)	140°/ 160°	140°/ 160°	140°/ 160°	140°/ 160°	160°/ 160°	160°/ 160°
	Backlight MTBF (hrs)	50000 (LED backlight)					
Touch	Touch Screen	Resistive Type 4-Wire with RS-232 interface		Resistive Type 5-Wire with RS-232 interface			
	Touch Controller	EETI MBMER4040CPBG	EETI MBMER4040CPBG	EETI MBMER4050CMBG	EETI MBMER4050CMBG	EETI MBMER4050CMBG	EETI MBMER4050CMBG
Motherboard	CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ N270 1.6GHz CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ process N270 1.6GHz CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ processor N270 1.6GHz CPU
	Chipset	Intel® NM10	Intel® 945GSE + ICH7M	Intel® NM10	Intel® 945GSE + ICH7M	Intel® NM10	Intel® 945GSE + ICH7M
	RAM	One 204-pin SO-DIMM socket, supporting DDRIII 800MHz modules for up to 2GB	One 204-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB	One 204-pin SO-DIMM socket, supporting DDRIII 800MHz modules for up to 2GB	One 204-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB	One 204-pin SO-DIMM socket, supporting 800 MHz DDR3 module up to 2GB	One 204-pin SO-DIMM socket, supporting 533 MHz DDR2 module for up to 2GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0					
	Audio Codec	Realtek ALC662 HD audio codec	Realtek ALC655 AC’97 audio codec	Realtek ALC662 HD audio codec	Realtek ALC655 AC’97 audio codec	Realtek ALC662 HD audio codec	Realtek ALC655 AC’97 audio codec
I/O Ports and Switches		2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch
Drive Bay	HDD Driver Bay	1 x 2.5 SATA HDD Bay	1 x 2.5” SATA HDD bay with anti-shock	1 x 2.5 SATA HDD Bay	1 x 2.5” SATA HDD bay with anti-shock	1 x 2.5” SATA HDD Bay	1 x 2.5” SATA HDD bay with anti-shock
	SSD	1 x mSATA (SATA2)	CF Type II	1 x mSATA (SATA2)	CF Type II	1 x mSATA (SATA2)	CF Type II
	CD-ROM Driver Bay	-	-	-	-	Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay
Expansion Slot		1 x PCIe mini card					
System Cooling		Fanless					
Environment	Operating Temperature	-10°C~50°C					
	Storage Temperature	-20°C~60°C					

PPC Series 15” ~ 19” PPC Selection Guide

LCD Size		15”		17"	19”
Model		PPC-5150A-H61	PPC-5152-D525	PPC-5170A-H61	PPC-5190A-H61
Display	LCD Size	15 "	15 "	17 "	19 "
	Max Resolution	1024(W) x 768(H)	1024(W) x 768(H)	1280(W) x 1024(H)	1280(W) x 1024(H)
	Brightness (cd/m²)	400	400	350	350
	Contrast Ratio	700:1	500 : 1	800 : 1	1000 : 1
	LCD Color	16.2M	16.2M	16.7M	16.7M
	Pixel Pitch (mm) (HxV)	0.297(H) x 0.297(V)	0.1095(H) x 0.1095(V)	0.264(H) x 0.264(V)	0.294(H) x 0.294(V)
	Viewing Angle (V/H)	125°/ 140°	160° / 140°	160°/ 160°	160°/ 170°
	Backlight MTBF (hrs)	50000			
Touch	Touch Screen	Resistive Type 5-Wire with RS-232 interface			
	Touch Controller	DMC 9000			
Motherboard	CPU	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor	Intel® Atom™ D525 1.8GHz dual core processor	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor
	Chipset	Intel® H61	Intel® ICH8M	Intel® H61	Intel® H61
	RAM	Two 204-pin DDR3 SO-DIMM slots (Max. 16GB)	One 204-pin DDR3 SO-DIMM slot (Max. 4GB)	Two 204-pin DDR3 SO-DIMM slots (Max. 16GB)	Two 204-pin DDR3 SO-DIMM slots (Max. 16GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 audio codec	Realtek ALC888 audio codec	Realtek ALC662 audio codec	Realtek ALC662 audio codec
I/O Ports and Switches		4 x RS-232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 2 x SFP Fiber LAN 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe Slot	2 x RS-232 (DB-9) 1 x RS-232 or RS-422/485 (DB-9) 2 x RS-422/485 (RJ-45) 2 x USB 2.0 VGA port (DB-15) 2 x Audio jacks (Line-out, MIC) AT/ATX switch 2 x USB 3.0 connector 2 x Combo (SFP / RJ-45) Gigabit LAN 4-channel video / audio capture (optional)	1 x RS-232/422/485 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 2 x SFP Fiber LAN 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe Slot	4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 2 x SFP Fiber LAN 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe Slot
Drive Bay	HDD Driver Bay	1 x 2.5” SATA HDD bay with anti-shook	2.5” SATA HDD bay	1 x 2.5” SATA HDD bay with anti-shook	1 x 2.5” SATA HDD bay with anti-shook
	SSD	CF Type II, mSATA (SATA2)	CF Type II socket	CF Type II, mSATA (SATA2)	CF Type II, mSATA (SATA2)
	CD-ROM Driver Bay	Slim Type CD-ROM Bay	N/A	Slim Type CD-ROM Bay	Slim Type CD-ROM Bay
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot,	Two PCI slots or one PCI slot plus one PCIe x1 slot	Either 1 x PCI slot or 1 x PCIe slot	Either 1 x PCI slot or 1 x PCIe slot
		1 x PCIe Mini card			
System Cooling		Active with Fan	Fanless	Active with Fan	Active with Fan
Environment	Operating Temperature	-20°C ~ 60°C	-20°C ~ 50°C	-20°C ~ 60°C	-10°C ~ 50°C
	Storage Temperature	-30°C ~ 70°C	-20°C ~ 70°C	-30°C ~ 70°C	-20°C ~ 60°C

8.4" Industrial Panel PC

PPC-3708A-N26

Intel® Atom™ N2600 Dual-Core Processor Fanless

PPC-3708A-N270

Intel® Atom™ N270 Processor Fanless

Features

- 8.4" 450 nits high brightness TFT LCD with LED backlight
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity suggested)

IP66 | High Brightess | -10°C~50°C | MOUNT | F3 One Key Recovery | iEi | symantec

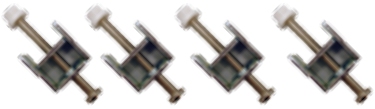
Specifications

Model		PPC-3708A-N26	PPC-3708A-N270
Display	LCD Size	8.4 "	
	Max Resolution	800(W) x 600(H)	
	Brightness (cd/m²)	450	
	Contrast Ratio	600:1	
	LCD Color	262K	
	Pixel Pitch (mm) (HxV)	0.213(H) x 0.213(V)	
	Viewing Angle (V/H)	140°/160°	
	Backlight MTBF (hrs)	50000 (LED Backlight)	
Touch	Touch Screen	Resistive Type 4-Wire with RS-232 interface	
	Touch Controller	EETI MBMER4040CPBG	
Motherboard	SBC	NANO-CV-N26001	NANO-945GSE-N270
	CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ process N270 1.6GHz CPU
	Chipset	Intel® NM10	Intel® 945GSE + ICH7M
	RAM	One 204-pin SO-DIMM socket, supporting DDR3 800MHz modules for up to 2GB	One 204-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 HD audio codec	Realtek ALC655 AC'97 audio codec
I/O Ports and Switches		2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD Bay	
	SSD	1 x mSATA (SATA2 Signal)	CF Type II
Expansion Slot		1 x PCIe Mini card	1 x PCIe Mini card
Physical	Front Panel Contruction	Aluminum Die-casting	
	Chassis Construction	Heavy-duty Steel (SECC)	
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm	
	Front Panel Color	Silver (Pantone 8001C)	
	Dimensions (WxHxD) (mm)	244 x 175 x 86.5	244 x 178 x 80.2
	Cut Out Dimensions (WxH) (mm)	233 x 167	233 x 167
	Net /Gross Weight	2.2Kg/ 4.4Kg	2.2 Kg / 4.4 Kg
System Cooling		Fanless	Fanless
Environment	Operating Temperature	-10°C ~ 50°C	-10°C~50°C
	Storage Temperature	-20°C~60°C	
	IP Rating	IP66 compliant front panel	
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak	
	Shock	10G acceleration part to part (11ms)	
Power Supply	Power Adapter	P/N: 63040-010060-050-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63040-010060-050-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC

Versatile Mounting Methods

Wall Mount

Stand



Panel Mount

Rack Mount

Ordering Information

Part No.		Description
Intel® Atom™ N2600	PPC-3708A-N26/R/2G-R11*	8.4" 450 cd/m² SVGA Panel PC with Intel® Atom™ N2600 1.6GHz processor, 2GB DDR3 RAM, touch screen, 9~28VDC input, RoHS
Intel® Atom™ N270	PPC-3708A-N270/R/1G-R22	8.4" 450 cd/m² SVGA Panel PC with Intel® Atom™ N270 1.6GHz/ 512KB L2 cache processor, 1GB DDR2 RAM, touch screen, 12VDC iput. R22, RoHS

* PPC supports 9-28V DC input with 4-pin DC jack. Standard product inculdes 12V DC adapter. For terminal block solution, please contact sales team.

Packing List

Item	Part No.	Description
Screw Kit	19600-000205-RS	
Power Cord	63040-010060-040-RS	EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR (10A 250V)
Power Adapter	63040-010060-050-RS	60W, 90VAC~264VAC for PPC-3708A-N270 & PPC-3708A-N26
PS/2 Cable	32006-000300-100-RS	1 x MINI DIN 6-pin MALE; 2 x MINI DIN 6-pin FEMALE
Panel Mounting Kit	19Z00-000026-RS	
Wall Mounting Kit	41014-057602-00-RS	ULTRA SET PLATE
	41020-016102-00-RS	WALL MOUNT BRACKET
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Screen Driver CD / Touch Pen		
User Manual & Driver CD		

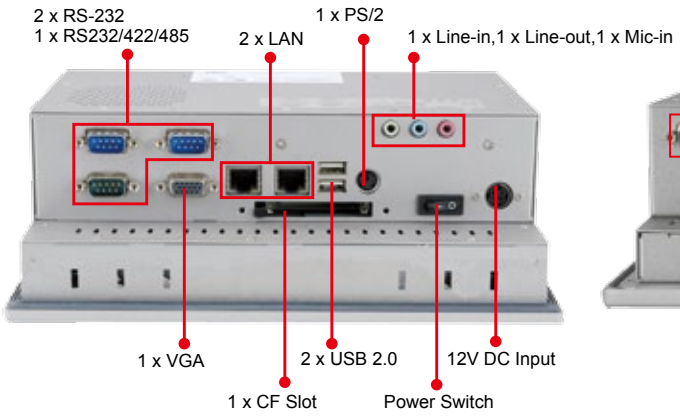
IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-084MS-R10
ARM	ARM-11-RS
STAND	STAND-100-RS

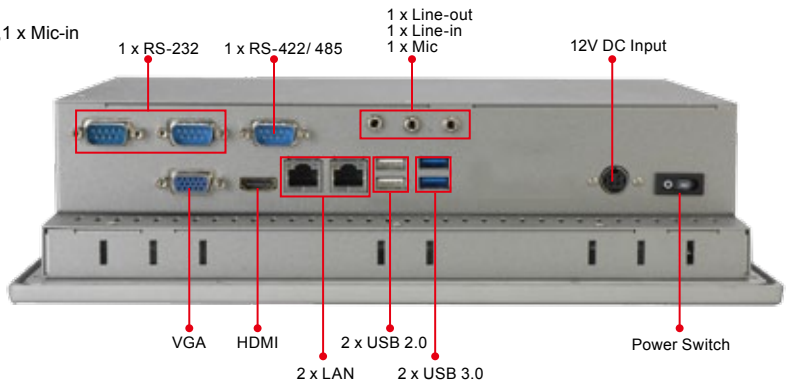
Options

Item	Part No.	Description
RS-422/485 Cable	32200-075202-RS	(A) D-SUB 9PIN MALE (B) DU PONT 2*7P P=2.0 FEMALE
HDD IDE Cable	32221-000200-100-RS	100MM, IDE 44-pin
Wi-Fi Module	PPC-WL-KIT02-R10	Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-37xxA-N26 series (Telec certified)

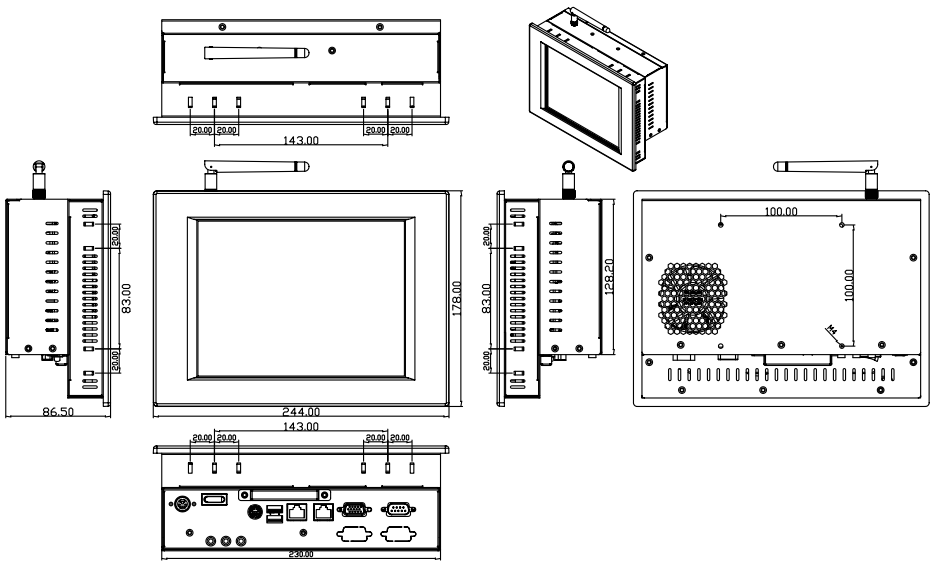
PPC-3708A
Fully Integrated I/O



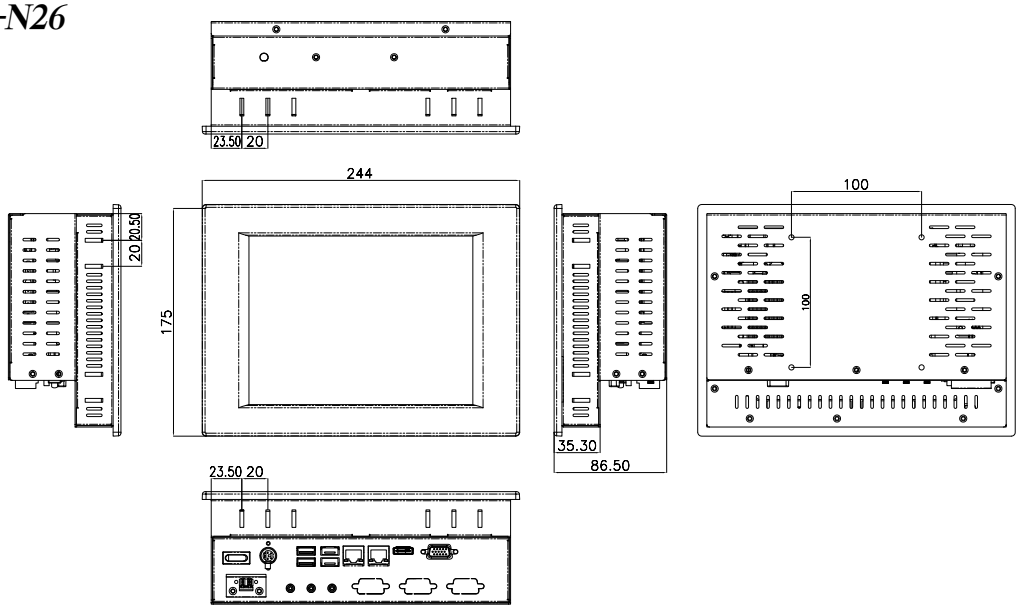
PPC-3708A-N26
Fully Integrated I/O



PPC-3708A
Dimensions
(Unit: mm)



PPC-3708A-N26
Dimensions
(Unit: mm)



10.4" Industrial Panel PC

PPC-3710A-N26

Intel® Atom™ N2600 Dual-Core Processor Fanless

PPC-3710A-N270

Intel® Atom™ N270 Processor Fanless

Features

- 10.4" 400 nits high brightness TFT LCD with LED backlight
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Robust aluminum front bezel and metal casing compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

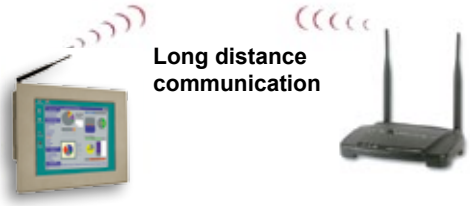
IP66 -10°C~50°C MOUNT F3 One Key Recovery iEi symantec

Specifications

Model		PPC-3710A-N26	PPC-3710A-N270
Display	LCD Size	10.4 “	
	Max Resolution	800(W) x 600(H)	
	Brightness (cd/m²)	400	
	Contrast Ratio	700:1	
	LCD Color	262K	
	Pixel Pitch (mm) (HxV)	0.264(H) x 0.264(V)	
	Viewing Angle (V/H)	140°/160°	
	Backlight MTBF (hrs)	50000 (LED Backlight)	
Touch	Touch Screen	Resistive Type 5-Wire with RS-232 interface	
	Touch Controller	EETI MBMER4050CMBG	
Motherboard	SBC	NANO-CV-N26001	NANO-945GSE-N270
	CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ N270 1.6GHz CPU
	Chipset	Intel® NM10	Intel® 945GSE + ICH7M
	RAM	One 204-pin SO-DIMM socket, supporting DDR3 800MHz modules for up to 2GB	One 204-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	
	Audio Codec	Realtek ALC662 HD audio codec	Realtek ALC655 AC’97 audio codec
I/O Ports and Switches		2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch
Drive Bay	HDD Driver Bay	1 x 2.5” SATA HDD Bay	
	SSD	1 x mSATA (SATA2 Signal)	CF Type II
Expansion Slot		1 x PCIe Mini card	1 x PCIe Mini card
Physical	Front Panel Contruction	Aluminum Die-casting	
	Chassis Construction	Heavy-duty Steel (SECC)	
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm	
	Front Panel Color	Silver (Pantone 8001C)	
	Dimensions (WxHxD) (mm)	311 x 242 x 77.8	311.5 x 242 x 77.8
	Cut Out Dimensions (WxH) (mm)	291 x 221	291 x 221
	Net /Gross Weight	3.4Kg / 5.8Kg	3.4 Kg / 5.8 Kg
System Cooling		Fanless	Fanless
Environment	Operating Temperature	-10°C~50°C	
	Storage Temperature	-20°C~60°C	
	IP Rating	IP66 compliant front panel	
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak	
	Shock	10G acceleration part to part (11ms)	
Power Supply	Power Adapter	P/N: 63040-010060-050-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63040-010060-050-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC

802.11b/g/n Wireless LAN Module

The PPC 37 series is equipped with a high speed wireless module that enables larger data transmission in real time. The Wireless LAN facilitates applications that require data transmission over large distances, such as in a large warehouse.



Fanless System

The PPC-3710A is designed with a low power consumtion platform featuring an Intel® Atom™ N270 and N2600 platform. The fanless system generates less heat while maintaining above-average performance. A fanless design eliminates the possibility of fan failure and extends the operation life of the device.

Ordering Information

Part No.		Description
Intel® Atom™ N2600	PPC-3710A-N26/R/2G-R11*	10.4" 400 cd/m² SVGA Panel PC with Intel® Atom™ N2600 1.6GHz processor, 2GB DDR3 RAM, and touch screen, 9~28VDC input, RoHS
Intel® Atom™ N270	PPC-3710A-N270/R/1G-R22	10.4" 400 cd/m² SVGA TFT Fanless Panel PC, Intel® Atom™ N270 1.6GHz/ 512KB, 1GB DDR2, Res T/S, Sliver Color, R22, RoHS

* PPC supports 9-28V DC input with 4-pin DC jack. Standard product inculdes 12V DC adapter. For terminal block solution, please contact sales team.

Packing List

Item	Part No.	Description
Screw Kit	19600-000205-RS	
Power Cord	32702-000200-100-RS	EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V)
Power Adapter	63040-010060-050-RS	60W, 90VAC~264VAC for PPC-3710A-N270, PPC-3710-N26
PS/2 Cable	32006-000300-100-RS	1 x MINI DIN 6PIN MALE; 2 x MINI DIN 6PIN FEMALE
Panel Mounting Kit	19Z00-000026-RS	
Wall Mounting Kit	41014-057602-00-RS	ULTRA SET PLATE
	41020-016102-00-RS	WALL MOUNT BRACKET
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Screen Driver CD / Touch Pen		
User Manual & Driver CD		

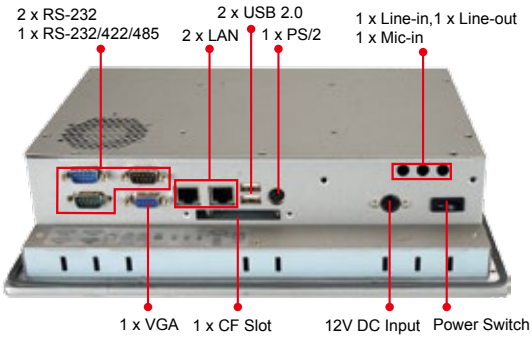
IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-104MS-R10
ARM	ARM-11-RS
STAND	STAND-100-RS

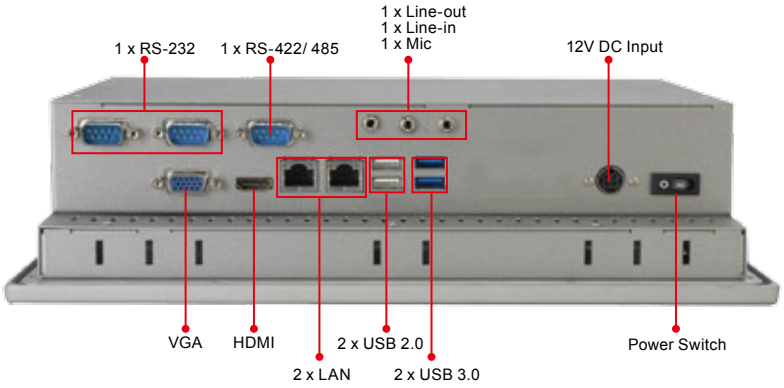
Options

Item	Part No.	Description
RS-422/485 Cable	32200-075202-RS	(A) D-SUB 9PIN MALE (B) DU PONT 2*7P P=2.0 FEMALE
Wi-Fi Module	PPC-WL-KIT02-R10	Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-37xxA-N26 series (Telec certified)

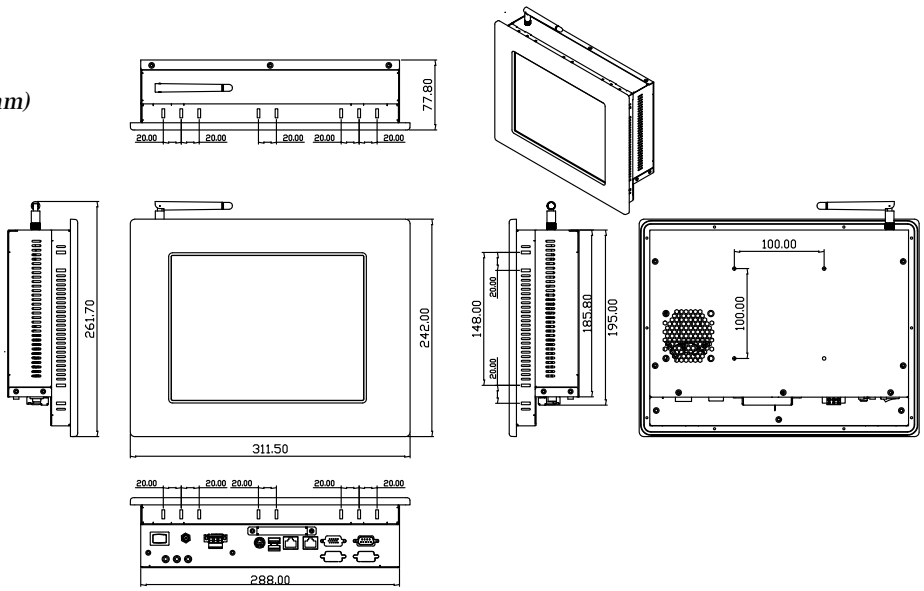
PPC-3710A
Fully Integrated I/O



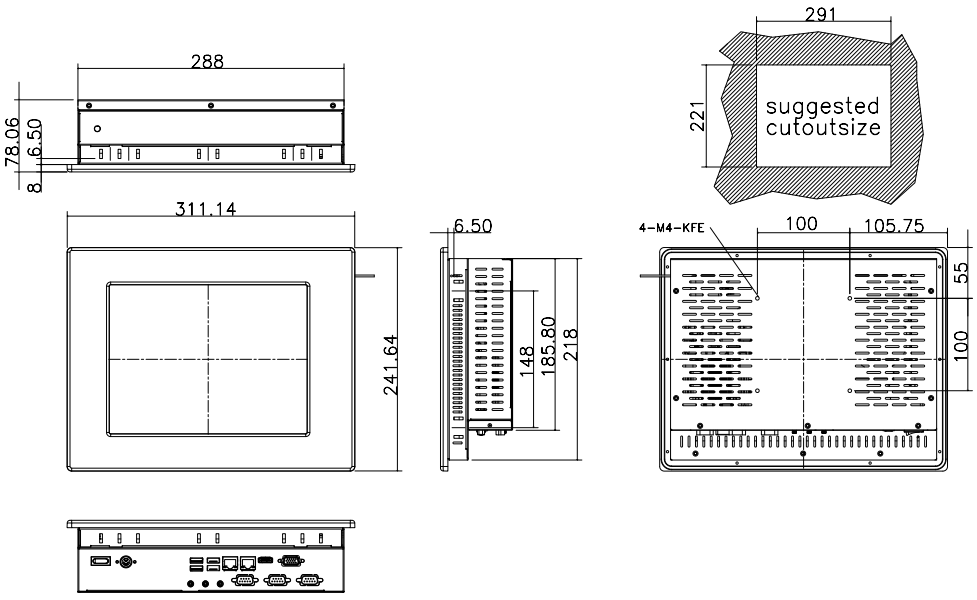
PPC-3708A-N26
Fully Integrated I/O



PPC-3710A
Dimensions (Unit: mm)



PPC-3710A-N26
Dimensions
(Unit: mm)



12.1" Industrial Panel PC

PPC-3712A-N26

Intel® Atom™ N2600 Dual-Core Processor Fanless

PPC-3712A-N270

Intel® Atom™ N270 Processor Fanless

Features

- 12.1" 500 nits high brightness TFT LCD with LED backlight
- Dual Gigabit Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional 802.11 b/g/n wireless kit
- One slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 65 compliant front panel

IP65 -20°C~50°C MOUNT F3 One Key Recovery iEi symantec

Specifications

Model		PPC-3712A-N26	PPC-3712A-N270
Display	LCD Size	12.1"	
	Max Resolution	1024(W) x 768(H)	
	Brightness (cd/m²)	500	
	Contrast Ratio	700:1	
	LCD Color	262K	
	Pixel Pitch (mm) (HxV)	0.3075(H) x 0.3075(V)	
	Viewing Angle (V/H)	160°/160°	
	Backlight MTBF (hrs)	50000 (LED Backlight)	
Touch	Touch Screen	Resistive Type 5-Wire with RS-232 interface	
	Touch Controller	EETI MBMER4050CMBG	
Motherboard	SBC	NANO-CV-N26001	NANO-945GSE-N270
	CPU	Intel® Atom™ N2600 dual-core processor 1.6GHz	Intel® Atom™ N270 1.6GHz CPU
	Chipset	Intel® NM10	Intel® 945GSE + ICH7M
	RAM	One 200-pin SO-DIMM socket, supporting DDR3 800MHz modules for up to 2GB	One 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	
	Audio codec	Realtek ALC662 HD audio codec	Realtek ALC655 AC'97 audio codec
I/O Ports and Switches		2 x RS-232 1 x RS-422/485 2 x RJ-45 for LAN Port 2 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x VGA Port 1 x Line-in, Line-out, Mic-in 1 x 12VDC input Power Jack 1 x Power Switch	2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch
Drive Bay	HDD Drive Bay	1 x 2.5" SATA HDD Bay	
	SSD	1 x mSATA (SATA2 Signal)	CF Type II
	CD-ROM Drive Bay	Slim Type CD-ROM Bay	SATA Slim Type CD-ROM Bay
Expansion Slot		1 x PCIe Mini card	1 x PCIe Mini card
Physical	Front Panel Contruction	Aluminum Die-casting	
	Chassis Construction	Heavy-duty Steel (SECC)	
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm	
	Front Panel Color	Silver (Pantone 8001C)	
	Dimensions (WxHxD) (mm)	340 x 260 x 74.8	340 x 277 x 73.4
	Cut Out Dimensions (WxH) (mm)	313 x 233	313 x 233
	Net/Gross Weight	6 Kg / 8 Kg	6 Kg / 8 Kg
System Cooling		Fanless	Fanless
Environment	Operating Temperature	-10°C~50°C	
	Storage Temperature	-20°C~60°C	
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak	
	Shock	10G acceleration part to part (11ms)	
Power Supply	Power Adapter	P/N:63040-010060-050-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC	P/N: 63040-010060-050-RS 60W Power Adapter (Meet PSE) Input: 90VAC~264VAC, 50/60Hz Output: 12VDC

Ordering Information

Part No.		Description
Intel® Atom™ N2600	PPC-3712A-N26/ R/2G-R11*	12.1" 500 cd/m² XGA Panel PC with Intel® Atom™ N2600 1.6GHz processor, 2GB DDR3 RAM, and touch screen, 9~28VDC input, RoHS
Intel® Atom™ N270	PPC-3712A-N270/ R/1G-R22	12.1" 500 cd/m² XGA fanless panel PC,Intel® Atom™ N270 1.6GHz/ 512KB, 1GB DDR2, Res T/S, Sliver Color, R22, RoHS

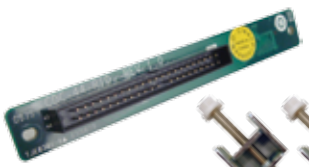
* PPC supports 9-28V DC input with 4-pin DC jack. Standard product inculdes 12V DC adapter. For terminal block solution, please contact sales team.

Packing List

Item	Part No.	Description
Screw Kit	19600-000207-RS	
SATA CD-ROM Cable	32801-006300-100-RS	SATA 7+6P FEMALE 180°;SATA 7P FEMALE 90°+LOCK;DU PONT 2*4P P=2.54 FEMALE
Power Cord	32702-000200-100-RS	EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V)
Power Adapter	63040-010060-050-RS	60W, 90VAC~264VAC for PPC-3712A
PS/2 Cable	32006-000300-100-RS	1 x MINI DIN 6PIN MALE; 2 x MINI DIN 6PIN FEMALE
Panel Mounting Kit	19Z00-000024-RS	
Wall Mounting Kit	41014-057602-00-RS	ULTRA SET PLATE
	41020-016102-00-RS	WALL MOUNT BRACKET
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Screen Driver CD / Touch Pen		
User Manual & Driver CD		

IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-121MS-R10
ARM	ARM-11-RS
STAND	STAND-100-RS



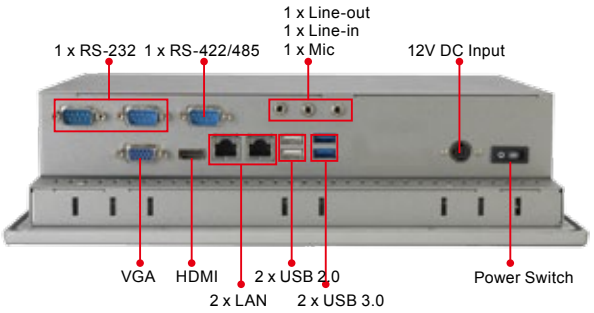
CD-ROM Installating Kit
19Z00-000112-RS

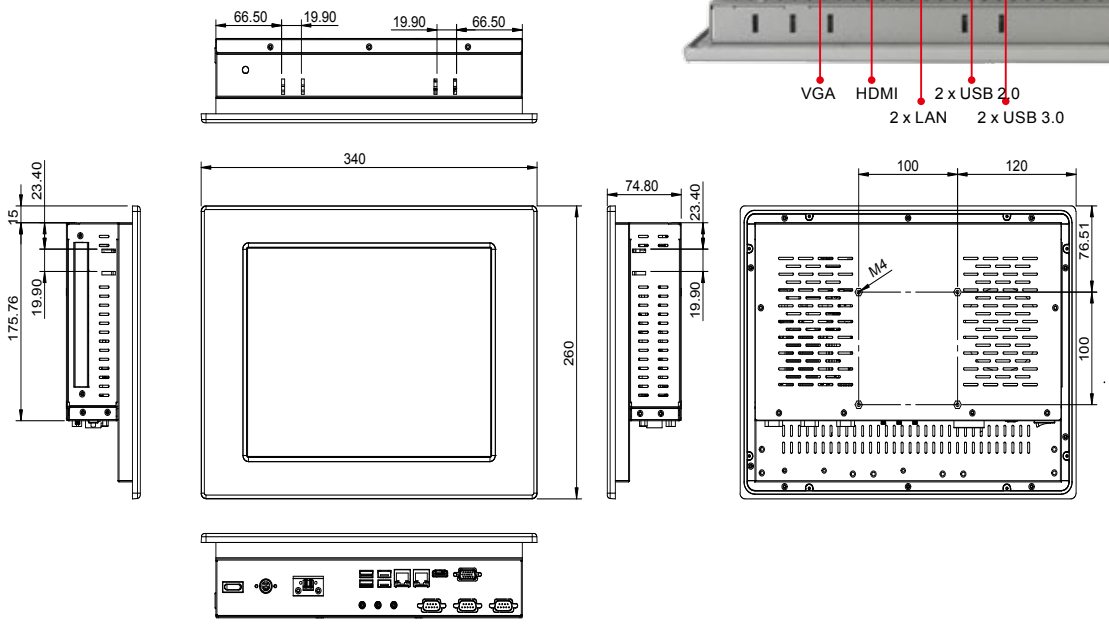
Panel Mount

Options

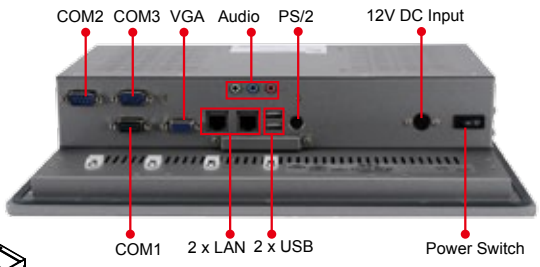
Item	Part No.	Description
RS-422/485 Cable	32200-075202-RS	(A) D-SUB 9PIN MALE (B) DU PONT 2*7P P=2.0 FEMALE
IDE CD-ROM Installating Kit	19Z00-000112-RS	50-pin CD ROM connector to 44-pin IDE connector transfer board
HDD IDE Cable	32200-000037-RS	250MM, IDE 44-pin
Wi-Fi Module	PPC-WL-KIT02-R10	Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-37xxA-N26 series (Telec certified)

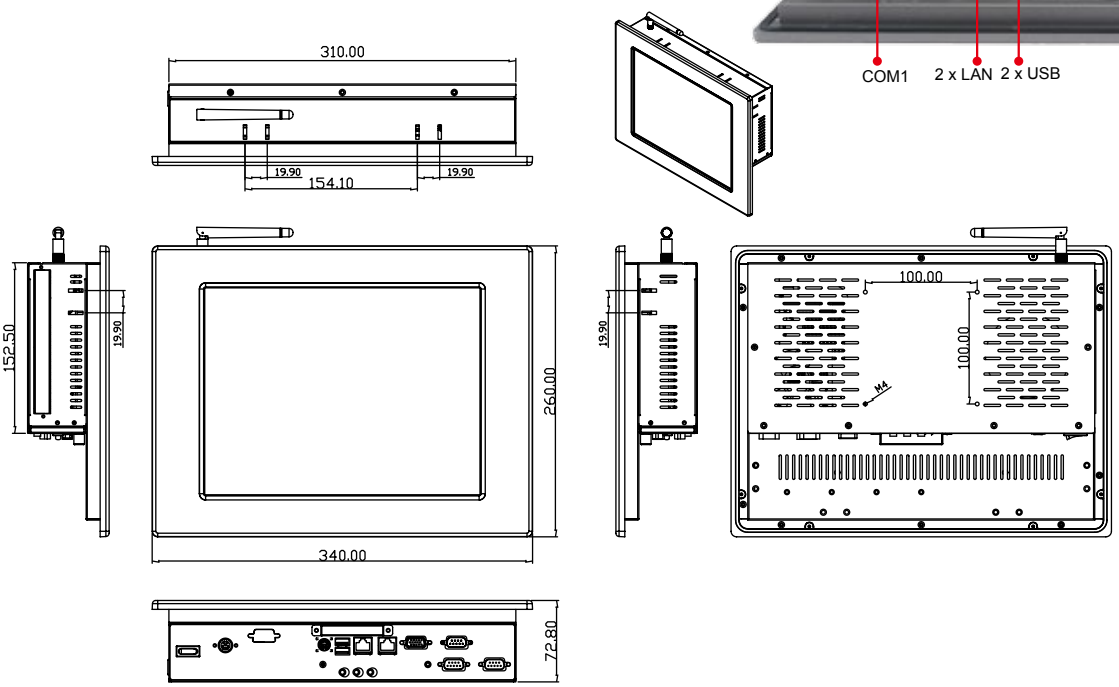
PPC-3712A-N26 Dimensions (Unit: mm)





PPC-3712A Dimensions (Unit: mm)





15" Industrial Panel PC

PPC-5152-D525

15” Flat-bezel Industrial Panel PC

Combo Gigabit LAN (SFP Fiber/RJ-45)

Features

- Robust aluminum with IP 64 compliant front bezel design
- 5-wire resistive touch
- Intel® Atom™ D525 1.8GHz dual-core with fan-less design
- 15’’ 400 nits LED backlight panel with 1024 x 768 resolution
- Two USB 3.0, two USB 2.0 and five COM ports available
- Flexible expansion interface (two PCI slots or one PCI slot + one PCIe slot)
- Optional 4-channel video/audio capture card and Wi-Fi (802.11 b/g/n) available
- Built-in 1.3-megapixel webcam with autofocus, auto enhancement and auto white balance
- Dual combo (10/100/1000BASE-T(X) or 1000 baseSFP slot) gigabit LAN ports

Wireless 802.11 b/g/n | Camera | Fanless | IP64 | Touchscreen | USB 3.0 | SFP Fiber | PCI/PCIe Expansion | MOUNT

Specifications

Model Name		PPC-5152-D525-R10
Display	LCD Size	15 “
	Max Resolution	1024(W) x 768(H)
	Brightness (cd/m²)	400
	Contrast Ratio	500:1
	LCD Color	16.2M
	Pixel Pitch (mm) (HxV)	0.1095(H) x 0.1095(V)
	Viewing Angle (V/H)	160° / 140°
	Backlight MTBF (hrs)	50000
	Touch Screen	Resistive Type 5-Wire with RS-232 interface
	Touch Controller	DMC 9000
Motherboard	SBC	PPCMB-5152A-D525
	CPU	Intel® Atom™ D525 1.8GHz dual core processor
	Chipset	Intel® ICH8M
	RAM	One 204-pin DDR3 SO-DIMM slot (Max.4GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC888 audio codec
I/O ports and switches		2 x RS-232 (DB-9 connector) 1 x RS-232 or RS-422/485 (DB-9 connector) 2 x RS-422/485 (RJ-45 connector) 2 x USB 2.0 connector VGA port (DB-15 connector) 2 x Audio jacks (line-out, Mic) 2 x USB 3.0 connector AT/ATX switch 2 x Combo (SFP / RJ-45) Gigabit LAN 4-channel video / audio capture (optional)
Drive Bay	HDD Drive Bay	2.5” SATA HDD bay
	SSD	CF Type II socket
	CD-ROM Drive Bay	N/A
Physical	Front Panel Contruction	Aluminum
	Chassis Construction	Heavy duty steel (SECC)
	Mounting	Panel, Wall, Rack, Stand and Arm (VESA 100 mm x 100 mm)
	Front Panel Color	Silver, Paint Tone PMS 8401C
	Dimensions (WxHxD) (mm)	422 x 331 x 80
	Cut Out Dimensions (WxH) (mm)	390 x 290
	Net / Gross Weight	6.5 kg/ 8.8 kg
Expansion Slot		Two PCI slots or one PCI slot plus one PCIe x1 slot
		Burglar-proof internal USB 2.0 port
System Cooling		Fanless
Environment	Operating Temperature	-20°C ~ 50°C
	Storage Temperature	-20°C ~ 70°C
	Vibration	MIL-STD-810F 514.5C-2 (with CF card or SSD)
	Shock	Half-sine wave shock 3G; 11ms; 3 shocks per axis
	IP level	Front Panel IP 64
	Safety & EMC	CE / FCC
Power	Power Adapter	90W power adapter
		Input: 100VAC~240VAC, 50/60Hz
		Output: 19V DC
	Power Requirement	9~36V DC Jack 9~36V Terminal Block
	Consumption	50W without add-on card

Ordering Information

	Part No.	Description
Converter card (HPE-2S1)	PPC-5152-D525/R/1G/2P-R11	15" 400 cd/m² XGA Fanless Panel PC with two PCI expansion slots, Intel® Atom™ D525 1.8GHz CPU, 1GB DDR3 RAM, 2M camera, microphone, touch screen, R11
Converter card (HPE-2S2)	PPC-5152-D525/R/1G/1P1E-R11	15" 400 cd/m² XGA Fanless Panel PC with one PCI and one PCIe x1 expansion slot, Intel® Atom™ D525 1.8GHz CPU, 1GB DDR3 RAM, 2M camera, microphone, touch screen, R11

Options

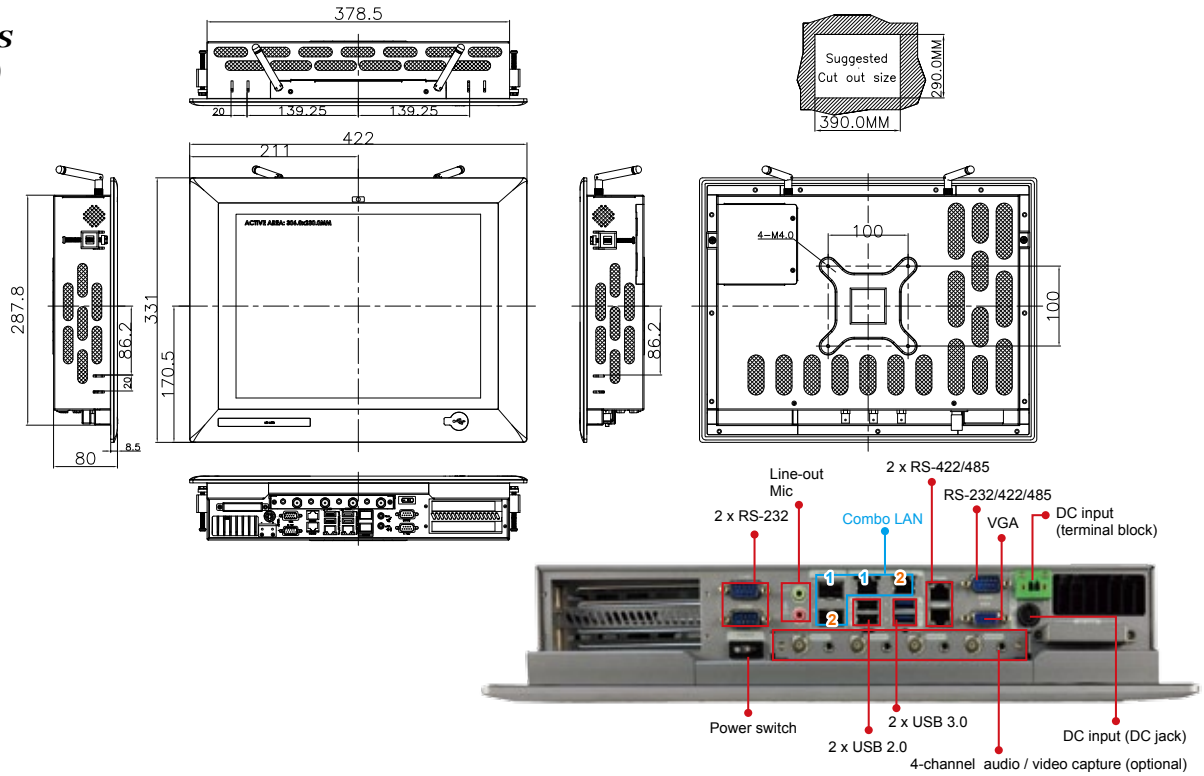
Item	P/N	Description
Panel Mounting Kit	PK-170M	
Wall Mounting Kit	WK-190MS-R10	
ARM	ARM-11-RS/ARM-31-RS	
Stand	STAND-A19-RS/STAND-A21-R10/ STAND-210-R11	
Wi-Fi Module Kit	PPC-WL-KIT01-R10	Wi-Fi module with RF cable and antennas, 2T2R, 802.11 b/g/n.(Telec certified)
Capture Card Kit	PPC-CP-KIT01-R10	4-channel video/audio capture card with input panel and cable, PCIe Mini interface, NTSC/PAL
Gigabit Ethernet SFP Module	SFP1G-SX/-I	1Gbps SFP optical transceiver, multi-mode / 550m, 850nm (0 ~ 70°C) /industrial grade (-20 ~ 85°C)
	SFP1G-MLX/-I	1Gbps SFP optical transceiver, multi-mode / 2Km, 1310nm (0 ~ 70°C) /industrial grade (-40 ~ 85°C)
	SFP1G-LX10/-I	1Gbps SFP optical transceiver, single-mode / 10Km, 1310nm (0 ~ 70°C) /industrial grade (-40 ~ 85°C)
	SFP1G-XD70/-I	1Gbps SFP optical transceiver, single-mode / 50Km, 1550nm (0°C ~ 70°C) / industrial grade (-40°C ~ 85°C)
Fiber Cord	FPC-LCLC-MM3M	Optical connector LC/LC, multi-mode, diameter 62.5/125 µm, length 3m.
	FPC-LCLC-SS3M	Optical connector LC/LC, single-mode, diameter 9/125 µm, length 3m.
OS: Win CE 6.0 (128MB CF Card)	PPCCF-5152-D525-CE060-128M-R10	
OS: Win XPE (4GB CF Card)	PPCCF-5152-D525-XPE-4G-R10	
OS: Win 7 Embedded (4GB CF Card)	PPCCF-5152-D525-WES7E-4G-R10	

(*it doesn't include video/audio capture card's driver)

Packing List

Item	P/N	Q'ty	Description
Utility CD	7B000-000732-RS	1	Drivers and user manual
One Key Recovery CD		1	
VESA Mounting Screw	44033-040062-RS	4	M4*6 for securing stand bracket
Chassis Screw	44013-030041-RS	4	M3*4 chassis screw for backup
Capture Card Screw	44003-030062-RS	4	M3*5 capture card screw for backup
VESA Fastener	19Z00-000024-RS	6	
HDD Screw	44043-030051-RS	4	
Pluggable DC-in Terminal Block	33101-000897-RS	1	
RJ-45 to DB9 COM port Cable	32005-000700-100-RS	2	
Touch pen	43125-0002C0-00-RS	1	
IR Romote Controller	7Z000-SLPCB005-RS	1	
Power Adapter	63040-010090-020-RS	1	FSP090-D2BA1;90~264VAC input;90W;19VDC output
Power Cord	32702-000401-100-RS	1	1500 mm, European Standard
Power Transfer Cord	32702-000300-100-RS	1	

Dimensions (Unit: mm)



15" Industrial Panel PC

PPC-5150A-H61

Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® Processor

Features

- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCI / PCIe x 1 expansion slot
- Optional slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

Specifications

Model		PPC-5150A-H61
Display	LCD Size	15 "
	Max Resolution	1024(W) x 768(H)
	Brightness (cd/m²)	400
	Contrast Ratio	700 : 1
	LCD Color	16.2M
	Pixel Pitch (mm) (HxV)	0.297(H) x 0.297(V)
	Viewing Angle (V/H)	140°/160°
	Backlight MTBF (hrs)	50000
Touch	Touch Screen	Resistive Type 5-Wire with RS-232 interface
	Touch Controller	DMC 9000
Motherboard	SBC	POS-H61
	CPU	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor
	Chipset	Intel® H61
	RAM	Two 204-pin DDR3 SO-DIMM slots (Max. 16G)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 audio codec
I/O Ports and Switches		4 x RS-232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 2 x SFP Fiber LAN 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe Slot
Drive Bay	HDD Driver Bay	1 x 2.5" SATA/IDE HDD bay with anti-shock
	SSD	CF Type II, mSATA (SATA2 Signal)
	CD-ROM Driver Bay	SATA Slim Type CD-ROM Bay
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot, 1 x PCIe Mini card
Physical	Front Panel Contruction	Aluminum
	Chassis Construction	Heavy-duty Steel
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm
	Front Panel Color	Silver (Pantone 8001C)
	Dimensions (WxHxD) (mm)	410 x 309 x 110.5
	Cut Out Dimensions (WxH) (mm)	387 x 286
	Net/Gross Weight	7 Kg / 11 Kg
Environment	Operating Temperature	-20°C ~ 60°C
	Storage Temperature	-30°C ~ 70°C
	System Cooling	Active with Fan
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak
	Shock	10G acceleration part to part (11ms)
	IP Rating	Front IP66 Compliant
Power Supply	AC Input	AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A
	DC Input	DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A

Ordering Information

Part No.		Description
Intel® H61 Platform	PPC-5150A-H61-P/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5150AD-H61-P/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-4520C , touch screen, RoHS
	PPC-5150A-H61-i3/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5150AD-H61-i3/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-4520C, touch screen, RoHS
	PPC-5150A-H61-i5/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5150AD-H61-i5/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-4520C , touch screen, RoHS
Riser Card	PCIR-01H-R10	1-Slot PCI riser card
	PCIER-101H-R10	1-Slot PCIe x 1 riser card

Packing List

Item	Part No.	Description
SATA CD-ROM Cable	32803-000300-100-RS	SLIMLINE SATA 7+6 P TO SATA 7P /4P POWER ,L=200/150mm.
Power Cord	32000-000002-RS	EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V)
Panel Mount Kit	19Z00-000024-RS	
Wall Mount Kit	41020-016102-00-RS	
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Pen		
User's Manual CD-ROM		

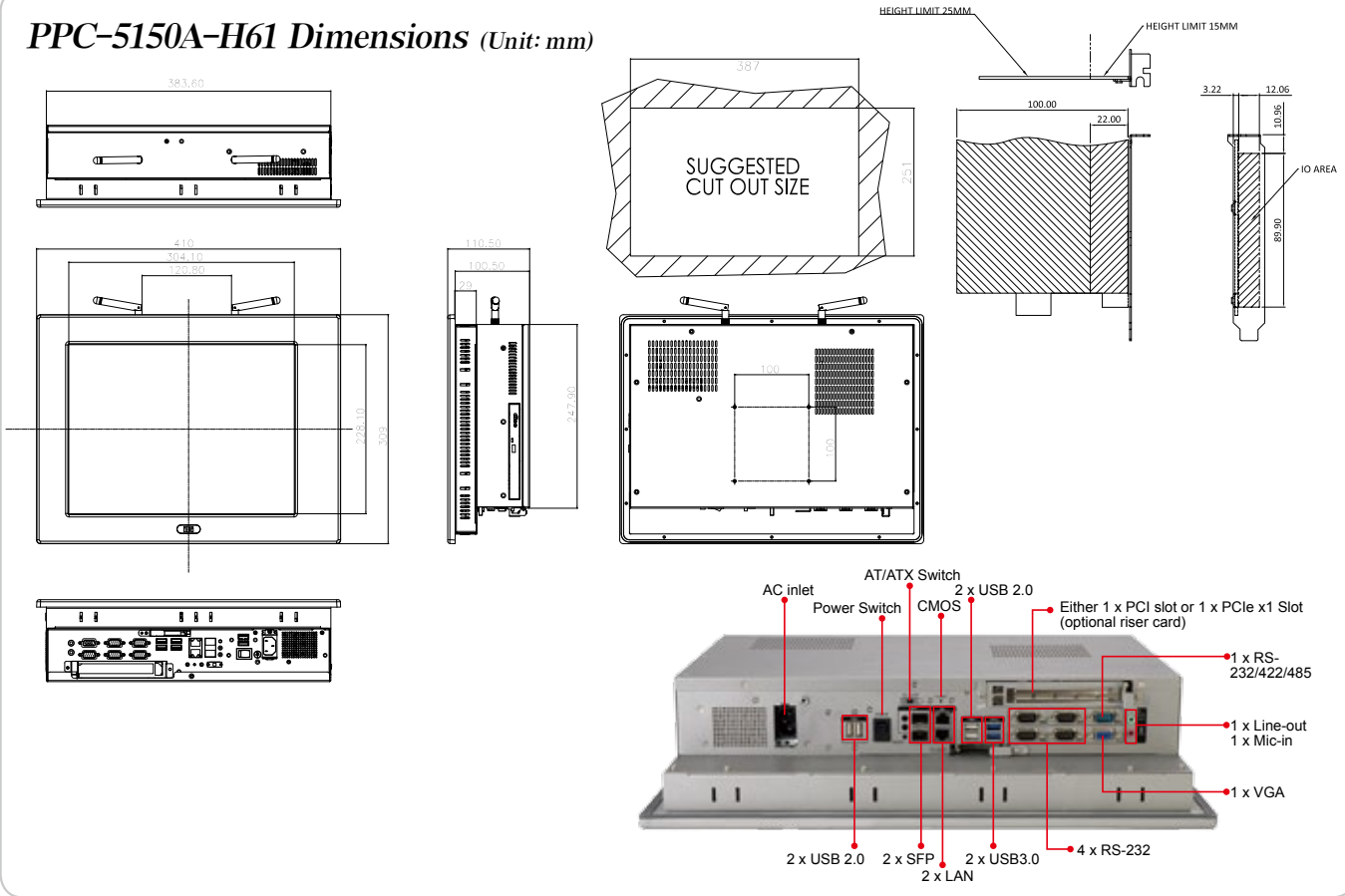
IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-150MS-R10
ARM	ARM-31-RS
STAND	STAND-210-R11

Options

Part Number	Description
PPC-WL-KIT02-R10	Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-5150A-H61, PPC-5170A-H61 (Telec certified)
73400-AD7760H01-RS	Slim type SATA DVD-ROM

PPC-5150A-H61 Dimensions (Unit: mm)



17" Industrial Panel PC

PPC-5170A-H61

Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® Processor

Features

- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCI / PCIe x1 expansion slot
- Optional slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel for PPC-5170A-H61
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

Specifications

Model		PPC-5170A-H61
Display	LCD Size	17"
	Max Resolution	1280(W) x 1024(H)
	Brightness (cd/m²)	350
	Contrast Ratio	800 : 1
	LCD Color	16.7M
	Pixel Pitch (mm) (HxV)	0.264(H) x 0.264(V)
	Viewing Angle (V/H)	170°/ 160°
	Backlight MTBF (hrs)	50000
Touch	Touch Screen	Resistive Type 5-Wire with RS-232 interface
	Touch Controller	DMC 9000
Motherboard	SBC	POS-H61
	CPU	2nd/3rd Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor
	Chipset	Intel® H61
	RAM	Two 204-pin DDR3 SO-DIMM slots (Max. 16GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 audio codec
I/O Ports and Switches		4 x RS-232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 2 x SFP Fiber LAN 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe Slot
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shock
	SSD	CF Type II, mSATA (SATA2 Signal)
	CD-ROM Driver Bay	SATA Slim Type CD-ROM Bay
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot 1 x PCIe Mini card
Physical	Front Panel Contruction	Aluminum
	Chassis Construction	Heavy-duty Steel
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm
	Front Panel Color	Silver (Pantone 8001C)
	Dimensions (WxHxD) (mm)	452 x 356 x 115
	Cut Out Dimensions (WxH) (mm)	426 x 331
	Net /Gross Weight	8 Kg / 12 Kg
	IP Rating	Front IP66 Compliant
Environment	Operating Temperature	-20°C ~ 60°C
	Storage Temperature	-30°C ~ 70°C
	System Cooling	Active with Fan
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak
	Shock	10G acceleration part to part (11ms)
Power Supply	AC Input	AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A
	DC Input	DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A

Ordering Information

Part No.		Description
Intel® H61 Platform	PPC-5170A-H61-P/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5170AD-H61-P/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-4520C, touch screen, RoHS
	PPC-5170A-H61-i3/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5170AD-H61-i3/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-4520C, touch screen, RoHS
	PPC-5170A-H61-i5/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5170AD-H61-i5/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-4520C, touch screen, RoHS
Riser Card	PCIR-01H-R10	1-Slot PCI riser card
	PCIER-101H-R10	1-Slot PCIe x1 riser card

Packing List

Item	Part No.	Description
SATA CD-ROM Cable	32803-000300-100-RS	SLIMLINE SATA 7+6 P TO SATA 7P /4P POWER , L=200/150mm.
Power Cord	32000-000002-RS	EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR (10A 250V)
Panel Mount Kit	19Z00-000024-RS	
Wall Mount Kit	41020-016102-00-RS	
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Pen		
User's Manual CD-ROM		

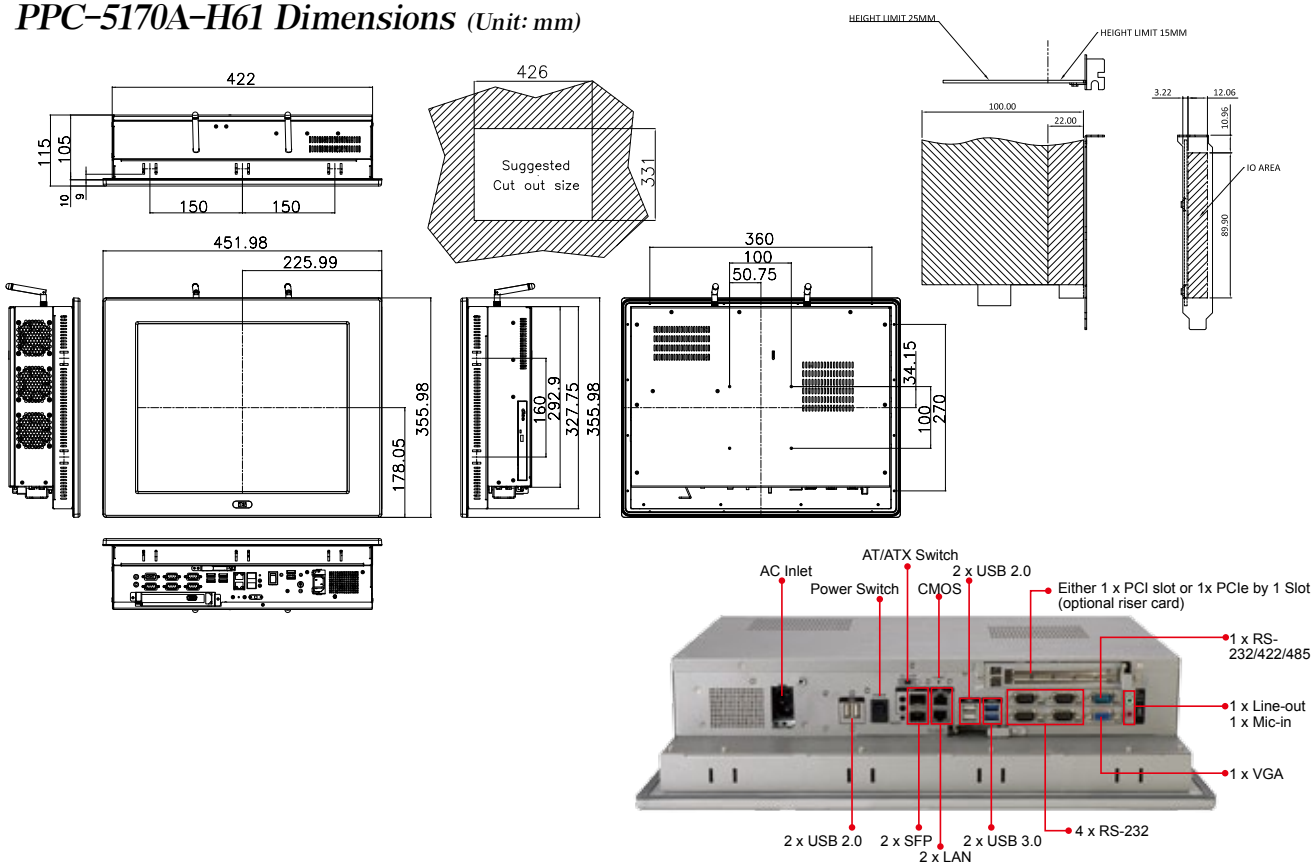
IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-170MS-R10
ARM	ARM-31-RS
STAND	STAND-210-R11

Options

Part Number	Description
19Z00-000112-RS	IDE CD-ROM Installation Kit (W/O IDE cable)
41019-0393C0-00-RS	IDE HDD Bracket
32200-000037-RS	25cm HDD IDE Cable
PPC-WL-KIT02-R10	Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-5150A-H61, PPC-5170A-H61
73400-AD7760H01-RS	Slim type SATA DVD-ROM

PPC-5170A-H61 Dimensions (Unit: mm)



19" Industrial Panel PC

PPC-5190A-H61

Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® Processor

Features

- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCI / PCIe x1 expansion slot
- Optional slim type CD-ROM drive bay
- Robust aluminum front bezel and metal casing
- IP 66 compliant front panel for PPC-5190A-H61
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

Wireless 802.11 b/g/n | IP66 | SFP Fiber | Intel® H61 | MOUNT | F3 One Key Recovery

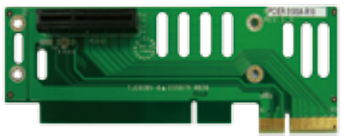
Specifications

Model		PPC-5190A-H61
Display	LCD Size	19"
	Max Resolution	1280(W) x 1024(H)
	Brightness (cd/m²)	350
	Contrast Ratio	1000 : 1
	LCD Color	16.7M
	Pixel Pitch (mm) (HxV)	0.294(H) x 0.294(V)
	Viewing Angle (V/H)	160°/ 170°
	Backlight MTBF (hrs)	50,000
Touch	Touch Screen	Resistive Type 5-Wire with RS-232 interface
	Touch Controller	DMC 9000
Motherboard	SBC	POS-H61
	CPU	2nd/3rd Generation Intel® Core™ Core™ i7/ i5/ i3, Pentium® and Celeron® processor
	Chipset	Intel® H61
	RAM	Two 204-pin DDR3 SO-DIMM slots (Max. 16GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 audio codec
I/O Ports and Switches		4 x RS-232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 2 x SFP Fiber LAN 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe Slot
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shook
	SSD	CF Type II, mSATA (SATA2 Signal)
	CD-ROM Driver Bay	Slim Type CD-ROM Bay
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot 1 x PCIe Mini card
Physical	Front Panel Contruction	Aluminum
	Chassis Construction	Heavy-duty Steel
	Mounting	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm
	Front Panel Color	Silver (Pantone 8001C)
	Dimensions (WxHxD) (mm)	482 x 399 x 115
	Cut Out Dimensions (WxH) (mm)	450 x 363
	Net / Gross Weight	12.6 Kg / 18.2 Kg
Environment	Operating Temperature	-10°C ~ 50°C
	Storage Temperature	-20°C ~ 60°C
	System Cooling	Active with Fan
	Vibration	5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak
	Shock	10G acceleration part to part (11ms)
	IP Rating	Front IP66 Compliant
Power Supply	AC Input	AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A
	DC Input	DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A

Ordering Information

Part No.		Description
Intel® H61 Platform	PPC-5190A-H61-P/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Pentium Dual CoreG6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5190AD-H61-P/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color,PSU ACE-4520C, touch screen, RoHS
	PPC-5190A-H61-i3/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5190AD-H61-i3/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color,PSU ACE-4520C, touch screen, RoHS
	PPC-5190A-H61-i5/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color, PSU ACE-A622A, touch screen, RoHS
	PPC-5190AD-H61-i5/R-R10	19" 350 cd/m² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2,Silver color,PSU ACE-4520C, touch screen, RoHS
Riser Card	PCIR-01H-R10	1-Slot PCI riser card
	PCIER-101H-R10	1-Slot PCIe x 1 riser card

PCIER-101H-R10



PCIe x4 slot with PCIe x1 signal riser card

PCIR-01H-R10

One-slot PCI riser card

Packing List

Item	Part No.	Description
User's Manual CD-ROM		
SATA CD-ROM Cable	32803-000300-100-RS	SLIMLINE SATA 7+6 P TO SATA 7P /4P POWER ,L=200/150mm.
Power Cord	32000-000002-RS	EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V)
Panel Mount Kit	19Z00-000024-RS	
Wall Mount Kit	41020-016102-00-RS	
IEI One Key Recovery CD	IEI-7B000-000478-RS	
Touch Pen		

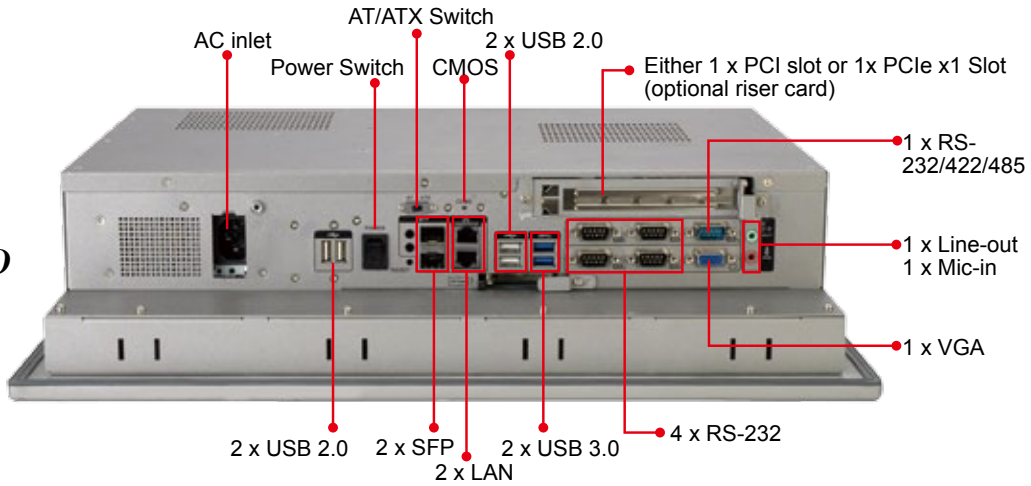
IQ Mounting Options

Item	Part No.
Rack Mount Kit	RK-190MS-R10
ARM	ARM-31-RS
STAND	STAND-210-R11

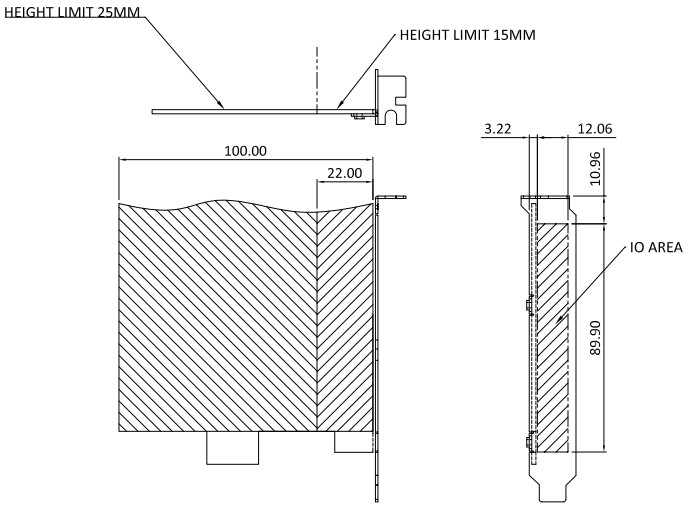
Options

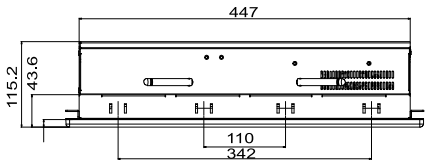
Part Number	Description
PPC-WL-KIT03-R10	Wi-Fi module with RF cable and antenna, 2T2R, 802.11 b/g/n for PPC-5190A-H61(Telec certified)
73400-AD7760H01-RS	Slim type SATA DVD-ROM

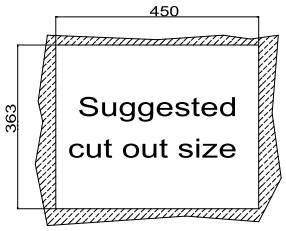
PPC-5190A-H61
Fully Integrated I/O

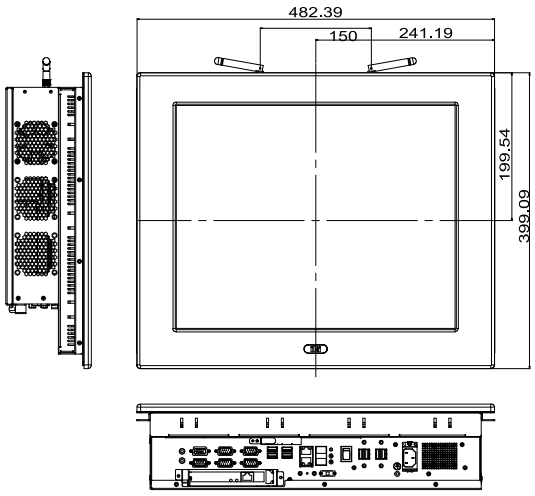


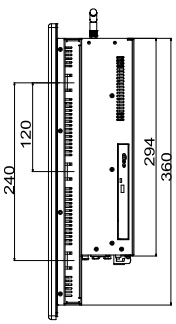
PPC-5190A-H61
Dimensions (Unit: mm)

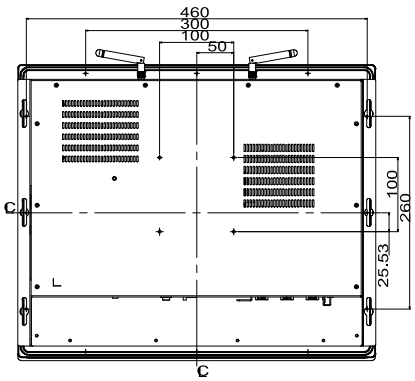












WIDS Series Selection Guide

LCD Size		15”	17”
Model		WIDS-515A-H61	WIDS-517A-H61
Display	**LCD Size**	**15 “**	**17 “**
	Max Resolution	1024(W) x 768(H)	1280(W) x 1024(H)
	Brightness (cd/m²)	400	350
	Contrast Ratio	700:1	800 : 1
	LCD Color	16.2M	16.7M
	Pixel Pitch (mm) (HxV)	0.297(H) x 0.297(V)	0.264(H) x 0.264(V)
	Viewing Angle (V/H)	140°/ 160°	170°/ 160°
	Backlight MTBF (hrs)	50000	50000
Touch	Touch Screen	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch Controller	DMC 9000	DMC 9000
Motherboard	CPU	2nd/3rd Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor	2nd/3rd Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor
	Chipset	Intel® H61	Intel® H61
	RAM	2 x 204-pin DDR3 SO-DIMM slot (max. 16GB)	2 x 204-pin DDR3 SO-DIMM slot (max. 16GB)
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0
	Audio Codec	Realtek ALC662 HD audio codec	Realtek ALC662 audio codec
I/O Ports and Switches		4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 2 x SFP Fiber LAN 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe expansion slot	4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0, 2 x USB 3.0 on rear 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/PCIe expansion slot
Drive Bay	HDD Driver Bay	1 x 2.5” SATA HDD bay with anti-shook	1 x 2.5” SATA HDD bay with anti-shook
	SSD	CF Type II, mSATA	CF Type II, mSATA
	CD-ROM Driver Bay	Slim Type CD-ROM Bay	Slim Type CD-ROM Bay
Expansion Slot		Either 1 x PCI slot or 1 x PCIe slot	Either 1 x PCI slot or 1 x PCIe slot
		1 x PCIe Mini card	1 x PCIe Mini card
System Cooling		Active with Fan	Active with Fan
Environment	Operating Temperature	-20°C ~ 60°C	-20°C ~ 60°C
	Storage Temperature	-30°C ~ 70°C	-30°C ~ 70°C

WIDS Industrial Panel PC

WIDS-515A-H61

15” IP65 Heavy Industrial Panel PC with Wi-Fi

WIDS-517A-H61

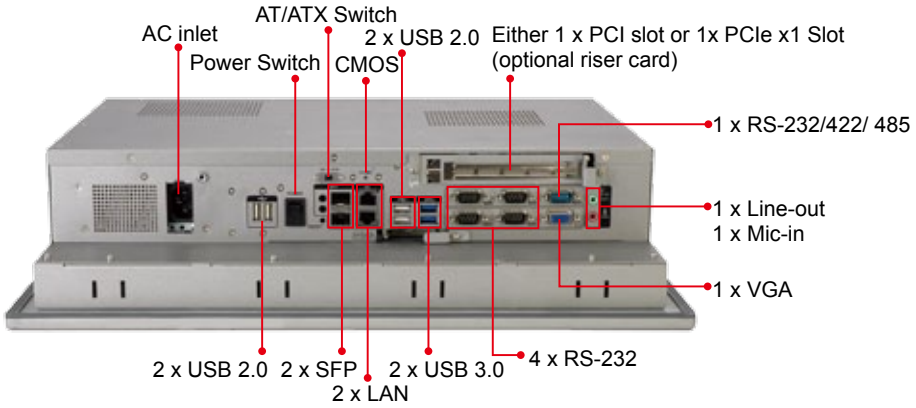
17” IP65 Heavy Industrial Panel PC with Wi-Fi

- Intel® H61 Express Chipset with 2nd/3rd Generation Intel® Core™, Pentium® and Celeron® processor
- Built-in PCIe Mini 802.11b/g/n wireless module for panel mount installation
- High brightness TFT-LCD panel with LED backlight
- Multiple storage options: 2.5" SATA HDD, CF slot, and mSATA
- Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
- Optional PCI / PCIe x1 expansion slot
- Optional slim type CD-ROM drive bay
- IP 65 compliant front panel
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

Specifications

Model		WIDS-515A	WIDS-517A
Display	LCD Size	15"	17"
	Max Resolution	1024(W) x 768(H)	1280(W) x 1024(H)
	Brightness (cd/m²)	400	350
	Contrast Ratio	700:1	800:1
	LCD Color	16.2M	16.7M
	Pixel Pitch (mm)	0.297 x 0.297	0.264 x 0.264
	Viewing Angle (V-H)	140°/160°	170°/160°
	Backlight MTBF (hrs)	50,000	
Touch	Touch Screen	Resistive Type 5-Wire with RS-232 interface	
	Touch Controller	DMC 9000	
Motherboard	SBC Model	POS-H61	
	CPU	2nd/3rd Generation Intel® Core™ i7/ i5/ i3, Pentium® and Celeron® processor	
	Chipset	Intel® H61	
	RAM	2 x 204-pin DDR3 SO-DIMM slot (max. 16GB)	
	Ethernet	Realtek RTL8111E PCIe GbE controller supporting ASF 2.0	
	Audio Codec	Realtek ALC662 HD audio codec	
I/O Ports and Switches		4 x RS232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 2 x SFP Fiber LAN 4 x USB 2.0 & 2 x USB 3.0 on rear 2 x USB 2.0 on front 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/ PCIe expansion slot	4 x RS232 COM Port 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 2 x SFP Fiber LAN 4 x USB 2.0 & 2 x USB 3.0 on rear 2 x USB 2.0 on front 1 x VGA Port 1 x Audio (Line-out, MIC-in) 1 x Power Switch 1 x AT / ATX Switch 1 x PCI/ PCIe expansion slot
Driver Bay	HDD Driver Bay	1 x 2.5" SATA HDD bay with anti-shook	
	SSD	CF Type II, mSATA (SATA2 Signal)	
	CD-ROM Driver Bay	Slim Type CD-ROM Bay	
Wireless		IEEE 802.11b/g/n 2T2R mode WLAN via internal PCIe Mini card interface	
Extension Slot		Either 1 x PCI slot or 1 x PCIe slot 1 x PCIe Mini card	
Physical	Front Panel Contruction	Aluminum	
	Construction Chasis	Heavy-duty Steel	
	Mounting Front Panel Color	Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm Silver (Pantone 8001C)	
	Dimension (WxHxD) (mm)	410 x 329 x 123	452 x 376 x 123
	Net Gross Weight	7 Kg / 11 Kg	8 Kg / 12 Kg
	Operating Temperature (°C) (Ambient with air flow)	-20°C ~ 60°C	-20°C ~ 60°C
	Environment StorageTemperature (°C)	-30°C ~ 70°C	-30°C ~ 70°C
	Humidity	10% to 95% (non-condensing)	10% to 95% (non-condensing)
	Vibration	5~17Hz, 0.1" double amplitude displacement 17~640Hz, 1.5G acceleration peak to peak	
	Shoock	10G acceleration part to part (11ms)	10G acceleration part to part (11ms)
Power Supply	ATX AC-Input	AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A	AC Input ATX power supply - P/N: 63000-ACEA622A166-RS - 220W power supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3V@14A, 5V@16A, 12V@10A, -12V@0.8A
	DC Input	DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A	DC Input ATX power supply - P/N: ACE-4520C-RS - 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3V@12A, 5V@12A, 12V@15.4A, -12V@0.5A

IO Interface



Ordering Information

Part No.		Description
15"	WIDS-515A-H61-P/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS
	WIDS-515AD-H61-P/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C , touch screen, RoHS
	WIDS-515A-H61-i3/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS
	WIDS-515AD-H61-i3/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C , touch screen, RoHS
	WIDS-515A-H61-i5/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS
	WIDS-515AD-H61-i5/R-R10	15" 400 cd/m² XGA Panel PC with POS-H61, CCore i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C , touch screen, RoHS
17"	WIDS-517A-H61-P/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS
	WIDS-517AD-H61-P/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Pentium Dual Core G6xxT (Above 2.2GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS
	WIDS-517A-H61-i3/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS
	WIDS-517AD-H61-i3/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Core i3 Dual Core 2xxxT CPU (Above 2.5GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS
	WIDS-517A-H61-i5/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS
	WIDS-517AD-H61-i5/R-R10	17" 350 cd/m² SXGA Panel PC with POS-H61, Core i5 Dual Core 2xxxTCPU (Above 2.7GHz), TDP 35W, 2GB DDR3 RAM*2, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS
Riser Card	PCIR-01H-R10	1-Slot PCI riser card
	PCIER-101H-R10	1-Slot PCIe x1 riser card

Packing List

Item	Part No.	Description
SATA CD-ROM Cable	32803-000300-100-RS	SATA 7+6 P TO SATA 7P /4P POWER
Power Cord	32702-000200-100-RS	EUROPEAN Standard ,1830MM
Panel Mount Kit	19Z00-000024-RS	
Wall Mount Kit	41020-016102-00-RS	WALL MOUNT BRACKET
	41014-057602-00-RS	ULTRA SET PLATE
Touch Pen	43125-0002C0-00-RS	
User's Manual CD-ROM	IEI-7B000-000543-RS	For WIDS-51xA-G41
IEI One Key Recovery CD	IEI-7B000-000478-RS	

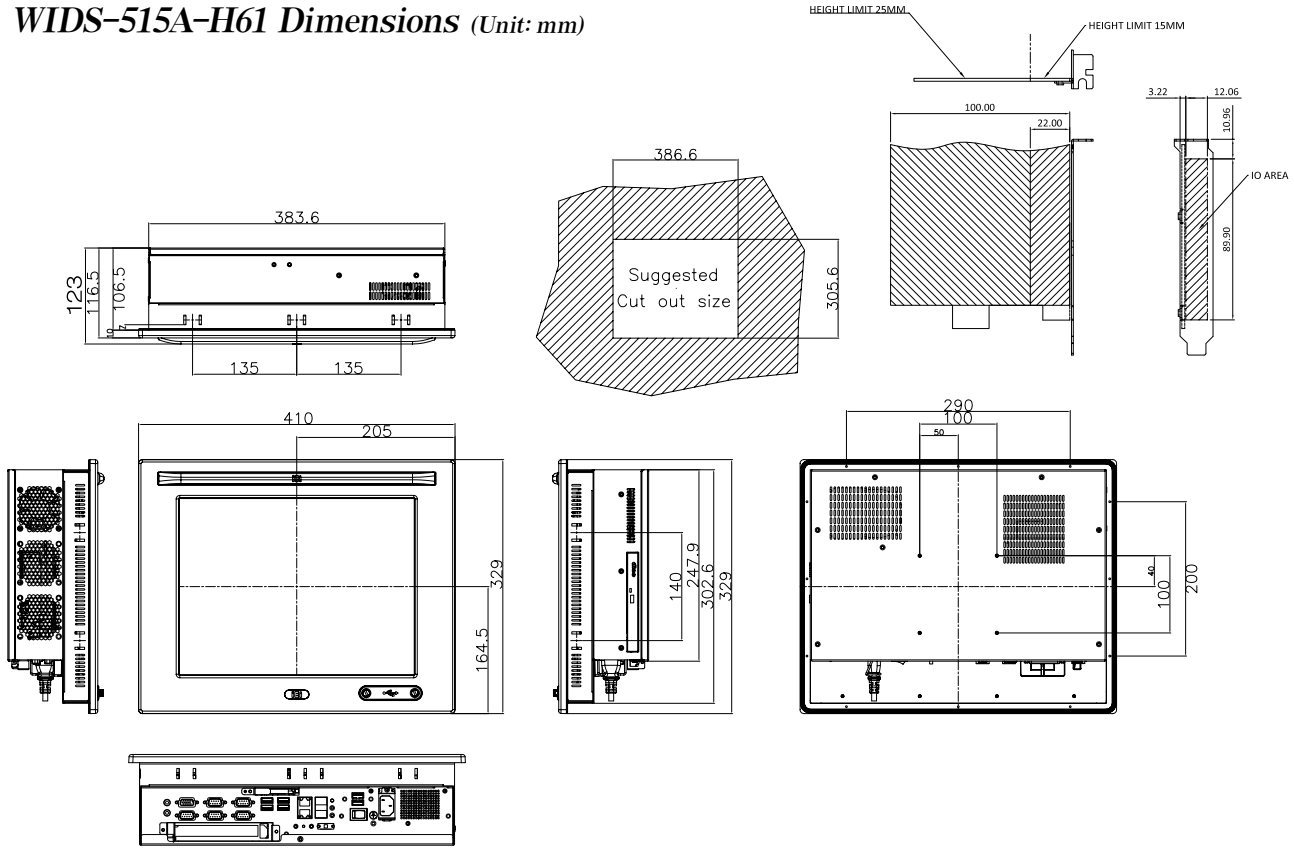
IQ Mounting Options

Item	WIDS-515A	WIDS-517A
Panel Mount Kit	PK-170M	
Wall Mount Kit	WK-190MS-R10	
Stand	STAND-210-R11	
ARM	ARM-31-RS	

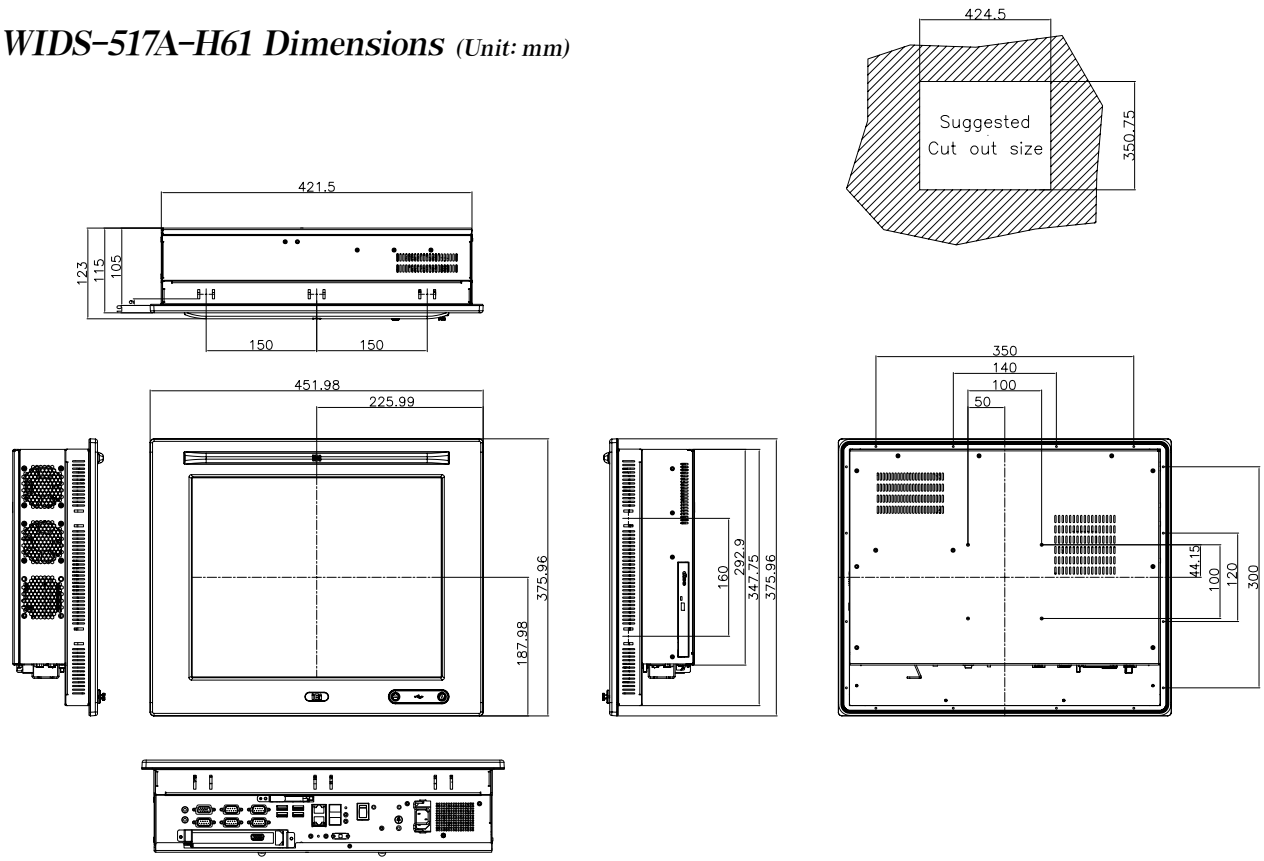
Options

Part Number	Description
73400-AD7760H01-RS	Slim type SATA DVD-ROM

WIDS-515A-H61 Dimensions (Unit: mm)



WIDS-517A-H61 Dimensions (Unit: mm)



Fully Ruggedized PPC Selection Guide

Model		S24A-QM87	S19A-QM87	S12A(SR)-N270	UPC-V312-D525	UPC-V315-NM70	UPC-V315-QM77
Display	LCD Size	24"	19"	12.1"	12.1"	15 "	15 "
	Max Resolution	1920 x 1080	1280 x 1024	1024 x 768	1024 x 768	1024(W) x 768(H)	1024(W) x 768(H)
	Brightness (cd/m²)	300	300	500 (1300)	600	400	400
	Contrast Ratio	5000:1	2000:1	500 : 1 (600 : 1)	700 : 1	700:1	700:1
	LCD Color	16.7M	16.7M	262K	16.2M	16.2M	16.2M
	Pixel Pitch (mm) (HxV)	276.75 x 276.75	0.294 x 0.294	0.240 (H) x 0.240 (V)	0.240 (H) x 0.240 (V)	0.297(H) x 0.297(V)	0.297(H) x 0.297(V)
	Viewing Angle (V/H)	178° / 178°	178° / 178°	120°/100° (160°/140°)	150° / 130°	125°/ 140°	125°/ 140°
	Backlight MTBF (hrs)	50000	50000	50000 (100000)	50000	50000	50000
Touch	Touch Screen	Projected Capacitive Touch with USB interface		Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch Controller	EETI EXC3000	EETI EXC3000	PENMOUNT 6000	DMC 9000	DMC 9000	DMC 9000
Motherboard	CPU	Intel® 22nm 4th Generation Mobile Core™ i5-4400E 2.7GHz processor		Intel® Atom™ N270 1.6GHz CPU	Intel® Atom™ D525 1.8GHz dual core processor	Intel® Celeron® Processor 847	Intel® Core™ i3-3217UE Processor Intel® Core™ i5-3517UE Processor
	Chipset	Intel® QM87	Intel® QM87	Intel® 945GSE + ICH7M	Intel® ICH8M	Mobile Intel® NM70 Express Chipset	Mobile Intel® QM77 Express Chipset
	RAM	Two 204-pin 1600/1333MHz dual-channel DDR3 SDRAM support up to 16G		Supports one 400/533MHz DDR2 SO-DIMM (2GB Max.)	On-board 1GB DDR3 SO-DIMM (System Max. 1GB)	Built in one 2 GB DDR3 memory (System Max. 8GB; on board Max. 4GB: socket Max. 4GB)	Built in one 2 GB DDR3 memory (System Max. 8GB; on board Max. 4GB: socket Max. 4GB)
	Ethernet	GbE1: Intel® I217LM with Intel® AMT 9.0 support GbE2: Intel® I210-AT PCIe controller		Realtek RTL8111CP PCIe GbE controller	Realtek RTL8111CP PCIe GbE controller	Intel® WG82579LM GbE PHY	Intel® WG82579LM GbE PHY
	Audio Codec	N/A	N/A	Realtek ALC892 audio codec	Realtek ALC888 audio codec	Realtek ALC892 HD audio codec	Realtek ALC892 HD audio codec
I/O Ports and Switches		3 x USB 2.0 2 x USB 3.0 1 x VGA 1 x DVI-D 1 x HDMI 1 x PS2 (through Y-type cable supporting KB/MS) 2 x CAN-bus 2.0B, 3-pin terminal block (2.5KV isolation protection) 1 x DB-9 RS-232 (non-isolated) , 4 x DB-9 RS-232/422/485 (2.5KV isolation protection) 2 x RJ-45 GbE LAN with teaming support (2KV isolation protection) 1 x Mic-in 1 x Line-out 1 x Line-in 2 x Antenna SMA hole (reserved) 1 x Isolated 9V ~ 36V DC 3-pin terminal block 1 x Power button		1 x 5-pin M12 connector for power adapter 1 x 8-pin M12 connector for two USB 1 x 5-pin M12 connector for CAN-bus and Audio line out 1 x 8-pin M12 connector for UART RS-232/422/485 1 x 8-pin M12 connector for UART RS-232 1 x 8-pin M12 connector for GbE LAN	RS-422/485 (4-pin box header) RS-232 (DB-9 connector) CAN-bus (3-pin terminal block) GbE LAN (RJ-45 connector) 4 x USB connector Audio jack (Line out, Mic) VGA port (DB-15 connector DC-IN 1 (terminal block) / DC-IN 2 (DC Jack) Reset button AT/ATX switch	3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-bus 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB 2.0 1 x Reset button 1 x Audio jack (Line out ,MIC) 1 x DC Jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT / ATX mode switch	3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-bus 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB 2.0 2 x USB 3.0 1 x Reset button 1 x Audio jack (Line out ,MIC) 1 x DC Jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT / ATX mode switch
Drive Bay	HDD Driver Bay	N/A	N/A	1 x 2.5" SATA HDD Bay with anti-shock	N/A	1 x 2.5" SATA SSD bay	1 x 2.5" SATA SSD bay
	SSD	2 x SSD Bay & 1 x CFast	2 x SSD Bay & 1 x CFast	CF Type II	CF Type II	mSATA (SATA2)	mSATA (SATA2)
Expansion Slot		2 x PCIe Mini Card	2 x PCIe Mini Card	Built-in 802.11b/g/n Wireless LAN Module (internal PCIe Mini interface)	PCIe Mini slot for Wi-Fi	-	1 x PCIe Mini Card
System Cooling		Fanless	Fanless	Fanless	Fanless	Fanless	Fanless
Environment	Operating Temperature	-15°C to 55°C (5% to 95% RH)		-10°C ~50°C	-20°C~60°C	-20°C ~60°C	-20°C ~60°C
	Storage Temperature	-20°C to 60°C	-20°C to 60°C	-20°C~60°C	-40°C~85°C	-30°C ~70°C	-30°C ~70°C
IP Rating		Front IP 66 / Rear IP 22	Front IP 66 / Rear IP 22	IP 67	Full IP 65	Full IP 65	Full IP 65

Marine Panel PC Series

New

The maritime field faces critical environmental challenges, making reliable and rugged systems essential. IEI provides maritime professionals with marine-grade computers and panel PCs that use leading technologies and reliable designs which are perfect for applications on the dock, on an open deck, or in the control room or bridge.

5 YEARS 5-YEAR SUPPLY GUARANTEE

Features

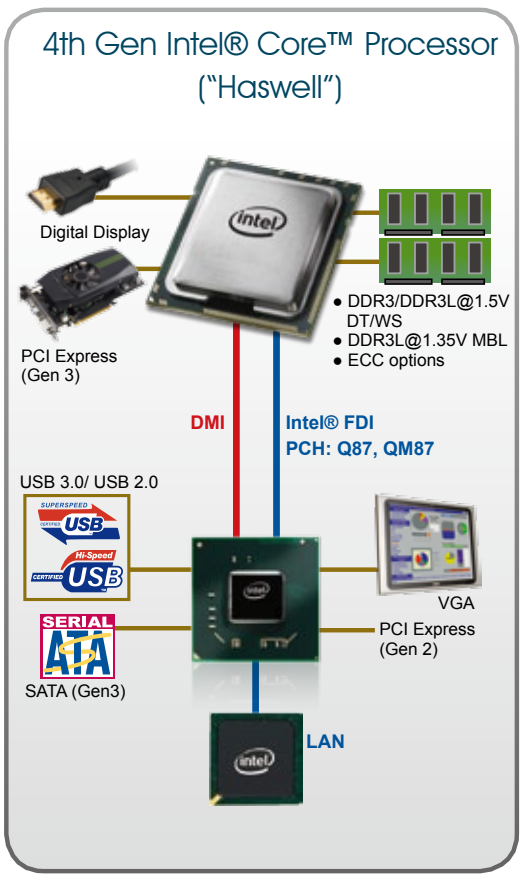
- **19" and 24" Fanless Panel PC with 4th Generation Intel® Core™ i5 Dual-core Processor**
- **-15°C ~ +55°C Wide Temperature and IP66 Protection with Flat-bezel Projected Capacitive Touchscreen**
- **Excellent Visual Performance**
  - Three independent displays
  - Full OSD function configuration
  - 0%~100% full range dimming
  - 178°/178° wide viewing angles
  - Optical bonding improves visibility under bright light (optional)
- **Isolation Protection**
  - RS-232/422/485 isolated serial ports
  - Isolated 9V ~ 36V DC input
  - 2 x Isolated CAN-bus 2.0B
- **iRIS Remote Management Module**

(Optional Stand Kit)

iRIS™ IPMI 2.0 Compliant | Triple Display | USB 3.0 | SATA 6Gb/s | Dual GbE

Intel® Core™ i5 High Performance Computing Power in a Fanless Design

IEI's high performance marine solutions are built with the powerful Intel® Core™ i5 CPU on fanless system architecture. Whether your application is general marine systems management, monitoring or conning systems, radar systems, or ECDIS navigation, IEI's marine computers will give you the most reliable use and best returns over the longest term.

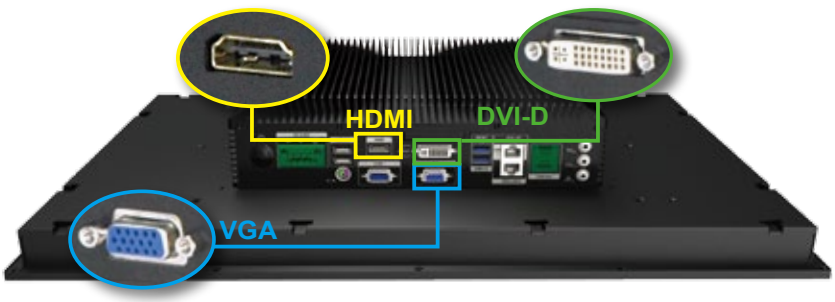


■ New "Tock" Architecture on 22nm Process

- Improved CPU performance with Intel® 22nm 4th Generation Mobile Core™ i5-4400E 2.7GHz processor
- Two 204-pin 1600/1333MHz dual-channel DDR3 SDRAM support up to 16GB

■ Intel® Processor Graphics with DX11.1 & OCL1.2

- Three independent displays: choose three among HDMI, DVI, LVDS and VGA



■ Reliable Fanless System

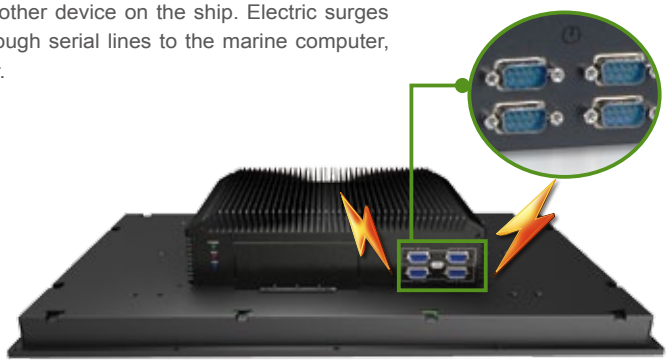
With IEI's fanless solutions, your vessels can avoid the bothersome of replacement of fan, increasing safety and efficiency for the crew and the entire ship.

Multiple Isolated Ports for Comprehensive Protection against Electrical Surges

Ground loop and electric surges are common in the marine applications of electronic products, due to the dense placement of devices. These stray electrical signals can cause equipment damage or malfunction.

■ Isolated 2.5 KV protection on the RS-232/422/485

IEI Marine Computer is protected from any stray electrical signals from other device on the ship. Electric surges that were generated on other electronic devices which often passed through serial lines to the marine computer, causing serious malfunction. Severe damage to the computer could occur.



■ Isolated 9~36V DC power 2250VDC Input to Output Basic Insulation

■ Isolated 2.5 KV 2 independent CAN 2.0B channels

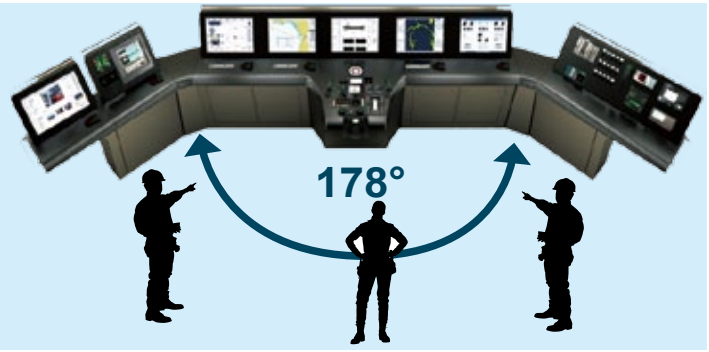
CAN 2.0B is kind of marine electronics data network for communication between marine electronic devices such as chart plotters, navigation instruments, GPS receivers, etc.

Multiple serial ports for connecting devices and sensors

Breakthrough Display and Touch Technologies

■ AMVA Ultra-high Contrast Ratio & Ultra-wide Viewing Angle Technology

Wide LCD (89°/89°/89°/89°) viewing angles allow marine users to conveniently view displayed images from many different angles, allowing for more flexible placement when arranging and installing ship display stations. IEI LCD panels allow viewing from 89° across four directions. This guarantees that displays will be clearly visible from nearly all angles with no noticeable color washout. Wide viewing angles give greater flexibility of usage, and translate into greater crew mobility and efficiency.

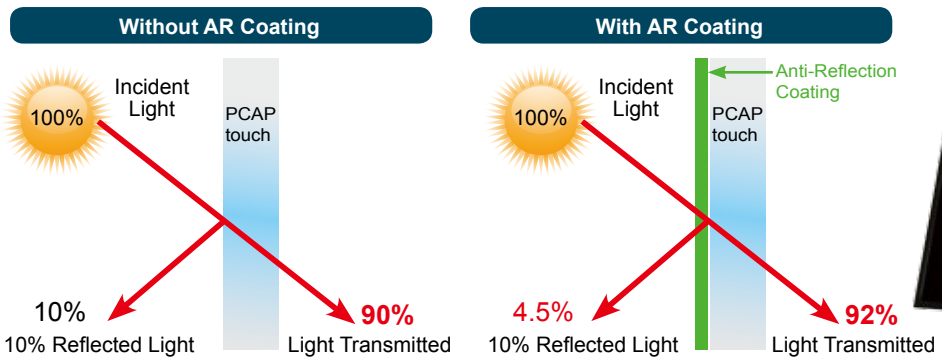


Comparison of low color washout inside angle images using AMVA and conventional MVA technologies

	S19A	S24A
Panel Type	PMVA	AMVA
Wide Viewing Angles	178°/178°	178°/178°
High Contrast	2000:1	5000:1

■ 92% AR Coating for PCAP Touchscreen

Designing PCAP touch panels to work in rugged, outdoor environments requires special considerations. Products designed for outdoor applications require high readability and durability even after thousands of hours of exposure to direct sunlight. IEI's marine Panel PCs covered with AR coating glass not only eliminate reflections but have better clarity than clear float glass. The IEI marine series is produced in a sol-gel dipping process with anti-reflection coating of standard clear float glass.



■ 7H Anti-scratch

Since the top surface layer of a PCAP sensor is typically glass, there is no concern about cleaning or corrosion.

	S19A	S24A
Hardness	7H	7H
Surface Treatment	92% AR coating	92% AR coating

■ 10-Point Touch Mode

10-point touch functionality delivers fast response times. Freely rotate, drag, and flick the map on the screen. 10-point touch can simplify the interface and provide an intuitive user experience that goes beyond the typical "button replacement" in most simple touch interfaces.

Specifications

Model		S19A-QM87	S24A-QM87
TFT LCD	LCD Size	19"	24"
	Panel Type	PMVA	AMVA
	Resolution (Aspect Ratio)	1280 x 1024 (5:4)	1920 x 1080 (16:9)
	Contrast Ratio	2000:1	5000:1
	Brightness (cd/m²)	300	300
	Viewing Angles	178°/178°	178°/178°
	MTBF (hrs)	50000	
Touchscreen & Controlller		Projected capacitive touchscreen / EETI EXC3000	
System	Chipset	Intel® QM87	
	CPU	Intel® 22nm 4th Generation Mobile Core™ i5-4400E 2.7GHz processor	
	RAM	Two 204-pin 1600/1333MHz dual-channel DDR3 SDRAM support up to 16GB	
I/O Interface		2 x USB 2.0 2 x USB 3.0 1 x VGA 1 x DVI-D 1 x HDMI 1 x PS2 (through Y-type cable supporting KB/MS) 2 x CAN-bus 2.0B, 3-pin terminal block (2.5KV isolation protection) 1 x DB-9 RS-232 (non-isolated) , 4 x DB-9 RS-232/422/485 (2.5KV isolation protection) 2 x RJ-45 GbE LAN with teaming support (2KV isolation protection)	1 x Mic-in 1 x Line-out 1 x Line-in 2 x Antenna SMA hole (reserved) 1 x Isolated 9V ~ 36V DC 3-pin terminal block 1 x Power button
Ethernet Controller		GbE1: Intel® I217LM with Intel® AMT 9.0 support GbE2: Intel® I210-AT PCIe controller	
Expansion		2 x Full-size PCIe Mini card slot, 1 x iRIS-2400 slot (iRIS remote management module)	
Sensor		Ambient light sensor (0% ~ 100%)	
OSD		Menu, Brightness down, Brightness up, LCD on/off by cap-sensor	
Storage		2 x 2.5" SSD bay with RAID 0/1 function 1 x Accessible CFast socket	
LED Indicator		Power (power on: green; power off: orange)/storage (red, blinking)/IPMI (blue)	
Power Requirement		Isolated 9V ~ 36V DC, screw-type 3-pin terminal block	
Operating Temperature		-15°C to 55°C (5% to 95% RH)	
Storage Temperature		-20°C to 60°C	
Thermal Design		Fanless	
Watchdog Timer		Supports 1~255 sec. system reset	
Certifications		EMC: CE, FCC Safety: DNV, IEC 60945 4th, IACS-E10 IP rating: IP66 compliant front panel /IP22 compliant rear cover	
Housing		Front aluminum sheet metal (Black C)	
Cut-out Dimensions (L x W)		442 mm x 373 mm	576 mm x 358 mm
Dimensions (L x W x H)		463 mm x 394 mm x 113 mm	592 mm x 374 mm x 113 mm
Net Weight		10 kg	15 kg
Mounting		Panel mounting	
Vibration and Shock		IEC 60945 and DNV 2.4 compliant	

Ordering Information

P/N	Description
S19A-QM87i-i5/PC/4G-R10	19" 300cd/m² SXGA marine panel PC with Intel® Mobile Core™ i5-4400E 2.7GHz CPU, 2*2GB DDR3 RAM,projected capacitive touch screen, isolated 9-36V DC, iRIS-2400 supported, R10
S24A-QM87i-i5/PC/4G-R10	24" 300cd/m² FHD marine panel PC with Intel® Mobile Core™ i5-4400E 2.7GHz CPU, 2*2GB DDR3 RAM,projected capacitive touch screen, isolated 9-36V DC, iRIS-2400 supported, R10

Packing List

Item	Q'ty	Description
Utility CD	1	Drivers and User Manual

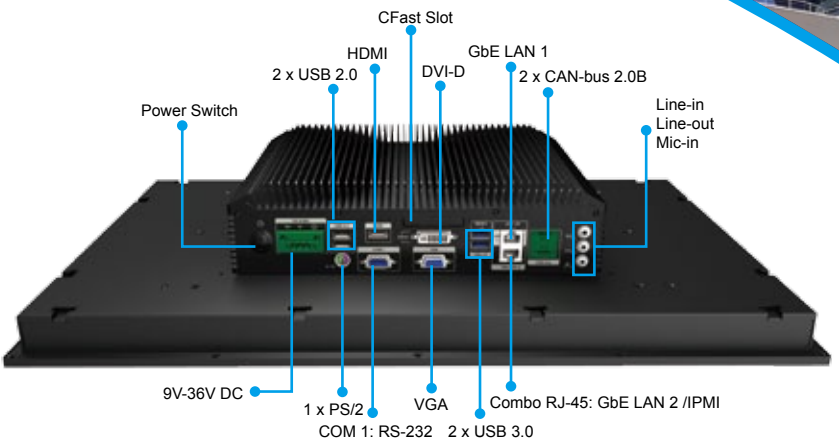
Options

Item	Part No.	Description
Panel Mount Kit	PK-S19A-R10	for S19A-QM87
	PK-S24A-R10	for S24A-QM87
iRIS Module	iRIS-2400-R10	IPMI 2.0 adapter card with AST2400 BMC chip for DDR3 SO-DIMM socket interface
Desktop Stand	STAND-S24A-R10	for S19A-QM87 & S24A-QM87
Ceiling Mount Kit	CEILMT-S24A-R10	for S19A-QM87 & S24A-QM87

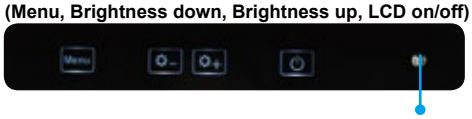
STAND-S24A-R10

CEILMT-S24A-R10

Marine Panel PC Series

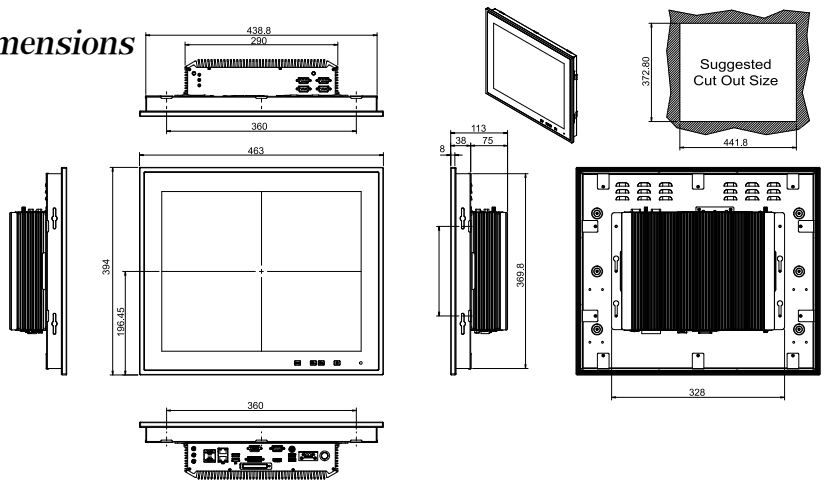


Four OSD keys by Cap-sensor
(Menu, Brightness down, Brightness up, LCD on/off)



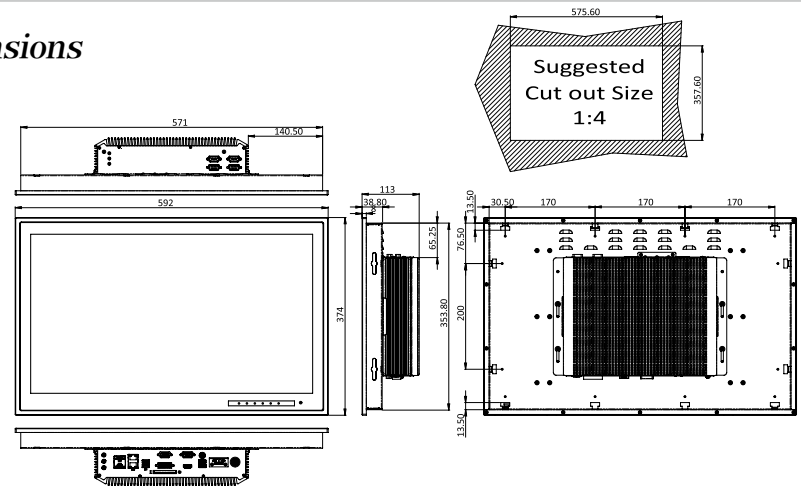
S19A-QM87 Dimensions

(Unit: mm)



S24A-QM87 Dimensions

(Unit: mm)



SBOX-100-QM87

New

- *Fanless Marine Computer with Intel® Core™ i5-4400E 2.7GHz processor*
- *Support IPMI 2.0 via IEI iRIS solution*

5 YEARS 5-YEAR SUPPLY GUARANTEE

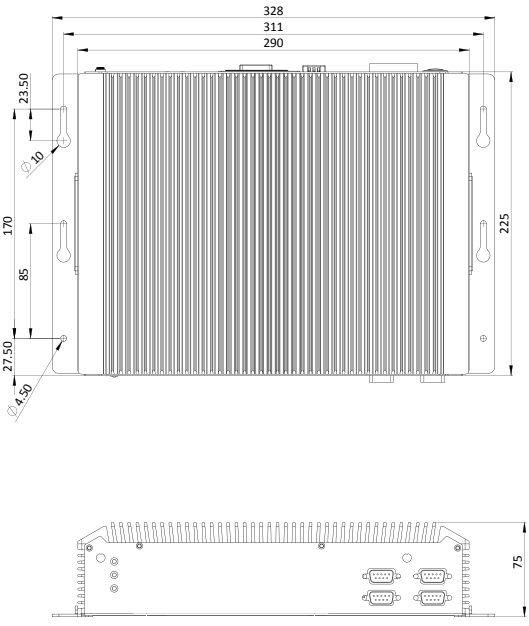
Features

- Fanless Marine Computer with 4th Generation Intel® Core™ i5 Dual-core Processor
- -15°C ~ +55°C Wide Temperature
- Isolation Protection
  - 4 x RS-232/422/485 isolated serial ports
  - Isolated 9 V~ 36V DC input
  - 2 x Isolated CAN-bus 2.0B
- 2 x 2.5" SSD bay with RAID 0/1 function
- Support IEI iRIS-2400 (IPMI 2.0 compliant)

iRIS™ IPMI 2.0 Compliant | Fanless | CAN-Bus | Triple Display | Dual HDD

Specifications

Model Name		SBOX-100-QM87
System	Chipset	Intel® QM87
	CPU	Intel® 22nm 4th Generation Mobile Core™ i5-4400E 2.7GHz Processor
	RAM	Two 204-pin 1600/1333MHz dual-channel DDR3 SDRAM support up to 16GB (pre-install with 4GB DDR3)
Storage		2 x 2.5" SATA III 6GB/s SSD bay with RAID 0/1 function, 1x external screwed type CFast socket
I/O Interface		1 x isolated 9 V~36 V DC 3-pin terminal block
		2 x CAN-BUS 2.0B, 3-pin terminal block (2.5KV isolation protection)
		1 x PS2
		1 x VGA
		1 x DVI-D
		1 x HDMI
		1 x DB-9 RS-232 (non-isolated), 4 x DB-9 RS-232/422/485 (2.5KV isolation protection)
		2 x RJ45 GbE LAN with teamming support (LAN2 supports iRIS function) (2KV isolation protection)
		2 x USB 2.0, 2 x USB3.0
		1 x Mic-in
		1 x Line-out, 1 x Line-in
Ethernet Controller		GbE1: Intel® I217LM with Intel® AMT 9.0 support GbE2: Intel® I210-AT
Expansion		2 x Full-size PCIe Mini card slot 1 x iRIS-2400 slot (iRIS remote management module)
LED Indicator		POWER (Power on: Green; Power off: Orange)/ Storage (Red, blinking)/IPMI (Blue)
Power Requirement		Isolated 9 V-36V DC, screw-type 3-pin terminal block
Operating Temperature		-15°C to 55°C (5% to 95% RH)
Storage Temperature		-20°C to 60°C
Thermal Design		Fanless
Watch Dog Timer		supporting 1-255 levels for time interval system reset
Approvals		EMC: CE, FCC
		Safety: DVN, IEC 60945 4th, IACS-E10 compliant
Dimensions (LxWxH mm)		463 x 394 x 108
Net Weight (Kgs)		8
Mounting		Wall Mounting
Vibration		IEC 60945 and DNV 2.4 compliant



Ordering information

Part No.	Description
SBOX-100-QM87i-i5/4G-R10	Fanless marine computer with Intel® Mobile Core™ i5-4400E 2.7GHz Processor ,DDR3 4GB, iRIS-2400 supported,isolated 9~36V DC, R10

Packing list

Item	Qty
Wall mount kit	1
Utility CD	1
One Key Recovery CD	1

S12A

12.1" Full IP 67 Panel PC

Full IP 67
Up to 1 meter of submersion

Features

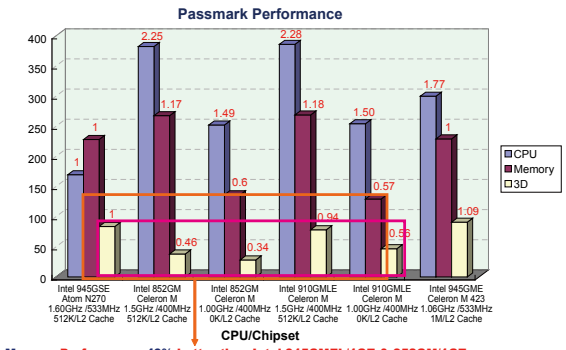
- 12.1" 1300 nits super high brightness LED available
- IP 67 (NEMA 6) fully-enclosed aluminum die cast enclosure and IP 67 waterproof lockable I/O
- Fanless system integrated with Intel® Atom™ N270 1.6G processor for ultra low voltage
- Supports one 2.0 GB (max.) 400/533 MHz DDR2 SO-DIMM
- Built-in internal Wi-Fi antenna supports 802.11b/g/n high standard
- CAN-bus interface for automotive applications
- Ambient light sensor detects ambient light for automated screen adjustments to optimize viewing
  (Advanced Deep Dimming to Black for sunlight readable model)
- Standard VESA 75/100 compliance

Wireless 802.11 b/g/n | IP67 | Fanless | High Brightness | CAN-Bus | BC AWARD | COMPUTEX TAIPEI 2009 BEST CHOICE | DNV | F3 One Key Recovery | iEi symantec.

Rugged Panel PC with Fanless Intel® Atom™ Processor

The fanless intelligent display computer, S12A, uses a 45 nm Intel® Atom™ processor with up to 1.6 GHz frequency and can be used in harsh and safety-critical applications in transport, avionics, engineering or industrial automation.
Better graphics performance is excellent for kiosk, self-service terminal, and digital signage applications.

Evaluating 3D mark performance with different generation CPU and chipset combination, Intel® Atom™ processor is the best solution for low power consumption and better graphics performance choice.



Memory Performance 40% better than Intel 915GMEL/1GZ & 852GM/1GZ
Graphic Performance 40% better than Intel 910GMLE/1GZ, 65% better than 852GM/1GZ

Sunlight Readable

■ Super High Brightness

S12ASR (Sunlight Readable Model) has greatly improved luminance through edge lighting to achieve super high brightness (up to 1000 cd/m²).

■ Low Reflection through AR (Anti-Reflection) Technology

Outdoor applications in daylight or other bright environments require technology that can suppress surface reflection. S12ASR sunlight readable model offers special AR (anti-reflection) surface treatment to prevent reflection, which ensures excellent visibility in daylight conditions.

Super High Brightness: 1000 nits
High Contrast: 700:1
Wide Viewing Angle: 60/60 (R/L) 45/75 (U/D)

IP 67 Fully-Enclosed Design

The S12A is front sealed and tested in the certified house chamber under UL's Witnessed Test Data Program (TDP). IEI follows IP 67 standard testing procedures. This full IP 67 touch monitor provides full IP 67 protection including connectors, cables and screen.

[IP 67] Dust-Tight

First Digit The first digit indicates the level of protection that the enclosure provides against access to hazardous parts

Level		Effective Against
6		No ingress of dust; complete protection against contact

[IP 67] Temporary immersion under water 1m

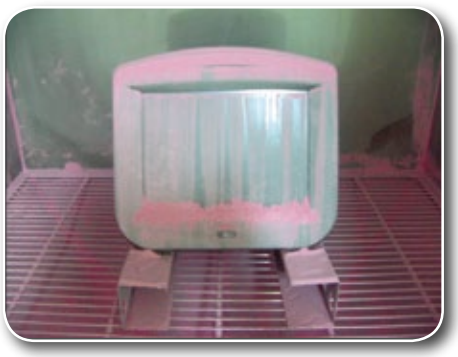
Second Digit Protection of the equipment inside the enclosure against harmful ingress of water

Level		Effective Against
7		Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1mof submersion)

Sealing enclosure with all sides of IP 67 !

IP6X Test

• Test for protection against dust



IPX7 Test

• Test for protection against water

Protected against the effects of temporary immersion between 15 cm and 1m. Duration of test is 30 minutes

• Air Flow Test

Air pressure measurement is used as the IP 67 test method, the air flow tester is capable of detecting leaks in product and evaluates the pass/fail status of the watertight system.

Uninterrupted Wireless Connection

The S12A series features high speed Wi-Fi IEEE 802.n protocol which builds on previous 802 standards by adding multiple-input multiple-output (MIMO) and 40 MHz operation to the physical (PHY) layer. MIMO uses multiple transmitter and receiver antennas to improve system performance.

Benefits

* Half the size of Mini-PCI
* Higher bandwidth interface
* Rigid mechanical spec.

27 times faster data transfer rate compared to 802.11b

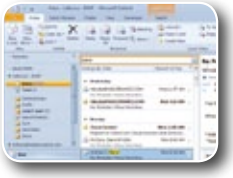
Protocol	Freq.	Thru.	Data	Range indoor	Range outdoor
802.11	(GHz)	(Mbit/s)	(Mbit/s)	(m)	(m)
a	5 GHz	23	54 Mbit/s	~35	~120
b	2.4 GHz	4.3	11 Mbit/s	~38	~140
g	2.4 GHz	19	54 Mbit/s	~38	~140
n	5 GHz and/ or 2.4 GHz	74	300 Mbit/s (2 streams)	~70	~250

802.11b/g Wi-Fi, which gives you up to broadband-speed browsing and connectivity, compared to traditional wired LAN.

The benefits here:

• Simple configuration
• Without hinders worker movement
• Without lessens man-hour productivity
• Without additional purchase of proprietary cables for specific devices
• Without the barrier to space

802.11a



Access to email, instant image and the Internet

802.11b/g

Streaming music Streaming video

802.11n

VoIP/Gaming/NAS

Ambient Light Sensor

The S12A built-in ambient light sensor automatically detects the amount of light in the viewing environment and auto-adjusts the brightness of the screen.

Benefits:
- Provides comfortable viewing and prevents eye strain
- Power saving
- Extended lamp life

Day Mode:
Adjust to maximum 1000 nits Sunlight Readable automatically

Panel brightness auto-adjustment depends on the ambient light amount to save the system power

Night Mode:
Adjust to acceptable brightness automatically in an insufficient light ambient

CAN-bus Automotive Applications

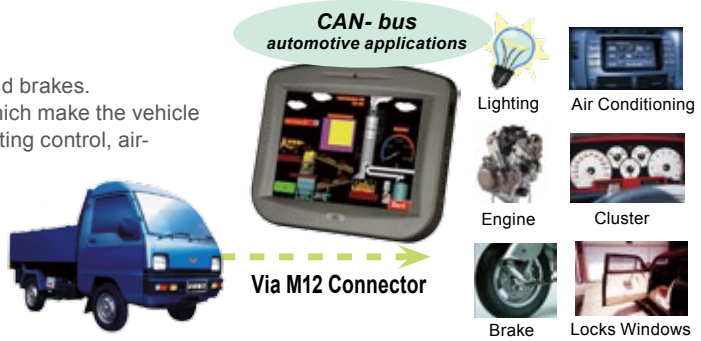
The S12A is equipped with automotive applied CAN-bus interface. The Control Area Network (CAN) is a serial bus system, originally developed by Bosch for use in automobiles, and now is increasingly being used for control in industrial and automotive applications

Controller Area Network

- 1Mb/s data rate
- High reliability bus
- CAN is an open standard with many variants
- Capable of providing real-time communication.

■ CAN in cars and truck engine

• Networking controllers for engine timing, transmission, chassis and brakes.
• Networking components of chassis electronics and electronics which make the vehicle more comfortable. Examples of such multiplex applications are lighting control, air-conditioning, central locking and seat and mirror adjustment.



Other Application Fields:

Reliable Die-Cast Aluminum Chassis

These ruggedized LCD products are designed for high reliability, shock and vibration tolerance, survival of high temperature, and corrosive environments. External materials like dust/water can be very destructive to any type of equipment over time.

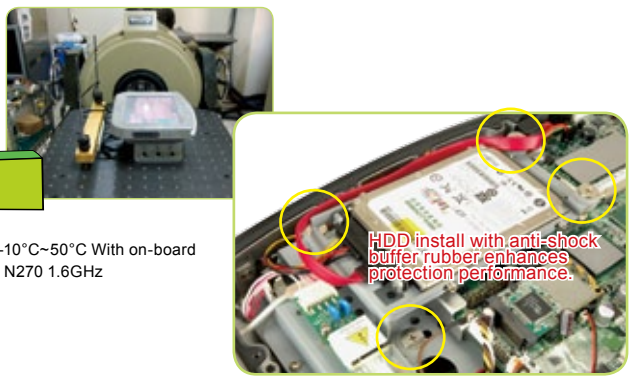
■ Fanless and Completely Sealed Strong Housing

Sealed housing strictly prevents water invasion while the rugged die-cast aluminum enclosure eliminates the need for a fan as a heat dissipation device.

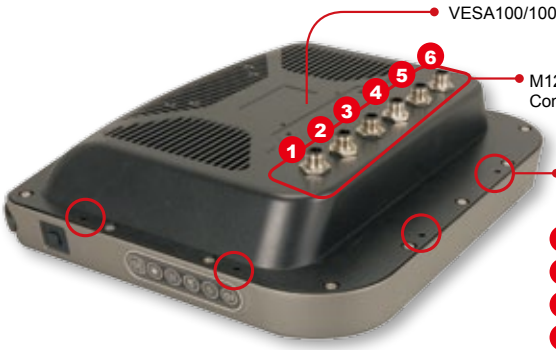
Operating Temperature: -10°C~50°C With on-board Intel® Atom™ Processor N270 1.6GHz

■ Rigorous Shock/Vibration Test

Compliant with MIL-STD-810F shock and vibration protection, as well as offering IP 67 water and dust proof front panel protection.



Fully Integrated I/O



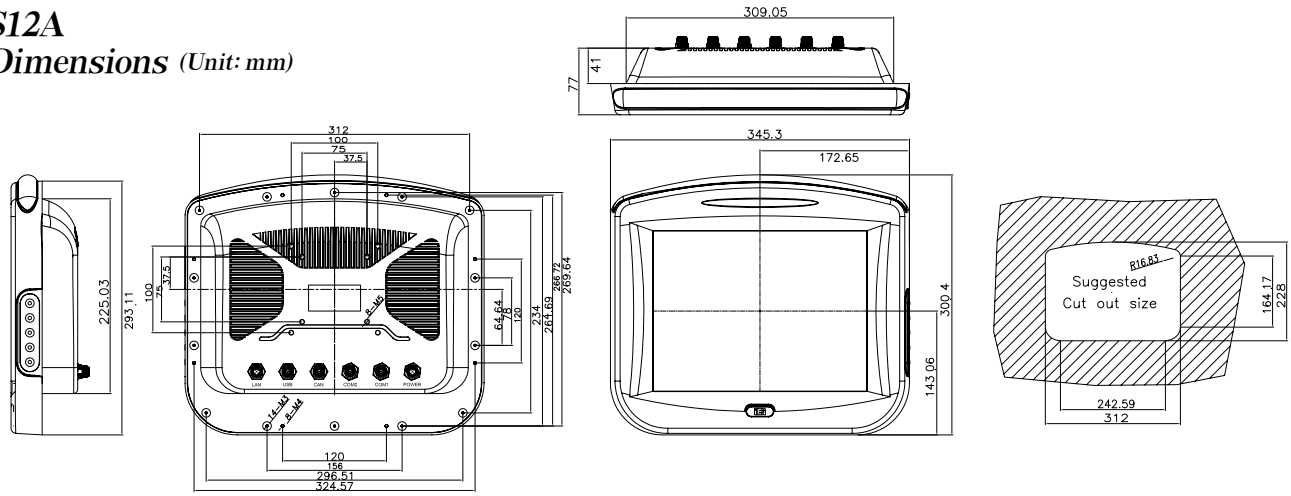
1. GbE LAN
2. RS-232
3. RS-232/422/485
4. CAN-bus and Audio line out
5. Two USB
6. Power Adapter

Specifications

Sunlight Readable

Model		S12A-N270	S12ASR-N270
Display	LCD Size	12.1"	
	Max Resolution	1024 x 768	
	Brightness (cd/m²)	500	1300
	Contrast Ratio	700:1	600:1
	LCD Color	16.2M	16.7M
	Pixel Pitch (mm)	0.3075 (H) x 0.3075 (V)	0.240 (H) x 0.240 (V)
	Viewing Angle (H-V)	160°/160°	160°/140°
	Backlight MTBF (hrs)	50000	100000
Touch	Touch Screen	Resistive Type 5-Wire with RS-232 interface	
	Touch Controller	PENMOUNT 6000	
Motherboard	CPU	Intel® Atom™ N270 1.6GHz CPU	
	Chipset	Intel® 945GSE + ICH7M	Intel® 945GSE + ICH7M
	RAM	One 400/533MHz DDR2 SO-DIMM (Max. 2GB)	
	Ethernet	Realtek RTL8111CP PCIe GbE controller	
	Audio Codec	Realtek ALC892 audio codec	
I/O Ports and Switches		1 x 5-pin M12 connector for Power Adapter	
		1 x 8-pin M12 connector for two USB	
		1 x 5-pin M12 connector for CAN-bus and Audio line out	
		1 x 8-pin M12 connector for UART RS-232/422/485	
		1 x 8-pin M12 connector for UART RS-232	
		1 x 8-pin M12 connector for GbE LAN	
Drive Bay	HDD Driver Bay	1 x 2.5" SATA HDD Bay	
	SSD	CF Type II	
Expansion Slot		1 x Wireless LAN Module (802.11 b/g/n) (internal PCIe Mini card interface) Telec certified	
Physical	Front Panel Contruction	Aluminum	
	Chassis Construction	Heavy-duty steel	
	Mounting	Panel, Rack, Stand and Arm VESA 100mm x 100mm	
	Front Panel Color	Silver (Pantone 8403C)	
	Dimensions (WxHxD) (mm)	345.3 x 300.4 x 77	
	Net/Gross Weight	4.2 Kg / 5.3 Kg	
Environment	Operating Temperature (°C)	-10°C ~50°C	-10°C ~50°C
	Storage Temperature (°C)	-20°C ~60°C	-20°C ~60°C
	Vibration	5~17Hz, 0.1" double amplitude displacement 17~640Hz, 1.5G acceleration peak to peak	
	Shock	10G acceleration part to part (11ms)	
Optional Power Supply		P/N: 63000-CLG60121C-RS - 60W Power Adapter - Input: 90VAC~264VAC, 50/60Hz - Output: 12VDC - M12 waterproof connector 5P	
Power Requirement		9~28VDC	
Front Panel Protection		IP 67 Compliant	
Power Consumption		33W	51W
Certificate		Meets CE, FCC, DNV	

S12A Dimensions (Unit: mm)



Ordering Information

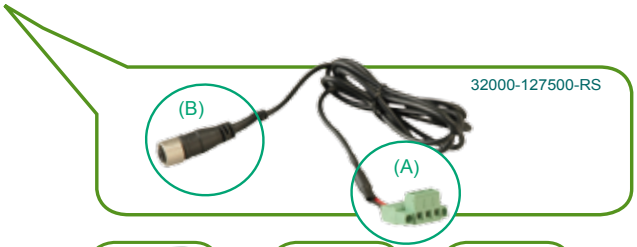
Part No.	Description
S12A/R/1/32-X-R30	12.1" 500 cd/m² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 320GB SATA HDD with Windows XP Embedded operaintg system, R30
S12A/R/1/1-C6-R30	12.1" 500 cd/m² IP67 panel PC with Intel® Atom™ N270, CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 1GB compact flash with Windows CE 6.0 operaintg system, R30
S12A/R/1/4-X-R30	12.1" 500 cd/m² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 4GB compact flash with Windows XP Embedded operaintg system, R30
S12ASR/R/1/1-C6-R40	12.1" 1300 cd/m² IP67 panel PC with Intel® Atom™ N270, CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 1GB compact flash with Windows CE 6.0 operaintg system, R40
S12ASR/R/1/4-X-R40	12.1" 1300 cd/m² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 4GB compact flash with Windows XP Embedded operaintg system, R40
S12ASR/R/1/32-X-R40	12.1" 1300 cd/m² IP67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module,touch screen,1GB DDR2 553 MHz, M12 connectors and 320GB SATA HDD with Windows XP Embedded operaintgsystem, R40

Packing List

Item	Part No.	Description
Panel mount screws pack	44013-030041-RS	
Power cable	32000-127500-RS	2000mm;16AWG; (A) terminal block connector; (B) M12 Waterproof connector
Utilities CD	7B000-000087-RS	
Touch pen	XTR104-0002-RS	
One Key Recovery CD		

Options

Item	Part No.
Rack mounting kit	SAILORRK-12
ARM	ARM-11-RS / ARM-31-RS
Stand	STAND-A12-RS / STAND-100-RS



Optional cables and adapter

Item	Part No.
USB cable	CB-M12USB02-R10
RJ-45 LAN cable	CB-M12RJ45-R10
DB-9 COM port cable	CB-M12COM-R20
DB-9 CAN-bus and AUDIO line-out cable	CB-M12ACAN-R20
AUDIO line-out cable	CB-M12AUDIO-R10
Water-proof power adapter	63000-CLG6012IC-RS

USB cable (CB-M12USB02-R10)

RJ-45 LAN cable (CB-M12RJ45-R10)

DB-9 COM port cable (CB-M12COM-R10)

DB-9 CAN-bus and AUDIO line-out cable (CB-M12ACAN-R10)

AUDIO line-out cable (CB-M12AUDIO-R10)

Water-proof Power Adapter (63000-CLG6012IC-RS)

UPC-V315-QM77 NM70

15” Full IP65 Aluminum Panel PC

- Intel® Ivy Bridge mobile chipset (QM77/ NM70)
- 15” 400 nits 1024 x 768 LCD with LED backlight
- Full IP 65 compliant die-casting aluminum chassis
- PCIe Mini card expasion
- Dual-DC input, 9V ~ 36V and 10.5V ~ 36V, switch automatically
- ACC power support
- Dual-band 2.4/5GHz Wi-Fi 802.11a/b/g/n 3T3R MIMO design
- Reserved space for 3.75G / HSUPA USB dongle
- Optional GPS receiver
- Optional EM or Mifare RFID reader
- Optional Bluetooth module
- Built-in 2-megapixel webcam with AF, AE and AWB capabilities
- CAN-bus interface with isolation
- F1 ~ F10 function keys with customization options

Various Connections Options

The UPC-V315 provides different kinds of communication interfaces, such as LAN/ WLAN/3G/GPS/ Bluetooth/RFID, which maximize flexibility of system integration and ensure seamless workflow.

Connection Feasibility

Dual-Band 2.4/5GHZ Wi-Fi

Dual-band 2.4G/5G 802.11 a/b/g/n 3T3R MIMO design with up to 450 Mbps speed

3.75G HSUPA (optional)

Comparing to wireless network, 3.75G HSUPA has higher mobility with long-range mobile communication and no hotspot limitation. It is also able to connect to the Internet in real time.

Bluetooth V2.1+EDR (optional)

Connect peripheral devices with Bluetooth, such as earphone, scanner, etc.

GPS (optional)

Travel navigation, real-time locating and path tracking

Robust Mechanical Design

The UPC-V315 is fully IP65 protected with aluminum chassis and water proof rubber gaskets. It also supports wide operating temperature from -20°C to 60°C.

-20°C 60°C

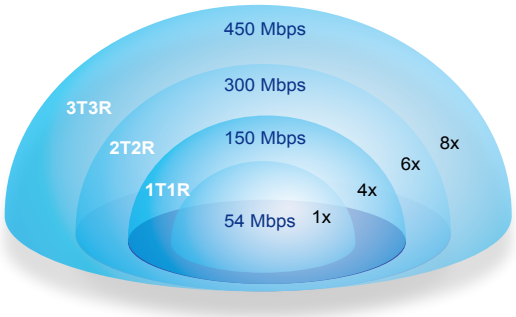
PCIe Mini Card Expansion

A. 3T3R Wi-Fi Module

UPC-V315 supports IEEE 802.11a/b/g/n 3T3R WiFi module, enhancing the transmission speed and coverage.

T: Transmitter
The number T is absolutely relative with speed, 1T up to 150Mbps, 2T up to 300Mbps, 3T up to 450Mbps.

R: Receive
The number R is relative with receiving dead angle and distance. The higher R is, the wider the receiving range.



B. Solid State Disk mSATA

mSATA is compact, rugged, and much faster than traditional HDD, which is suitable for harsh environment.

C. 4-Channel Capture Card

The UPC-V315-QM77 supports 4-channel video capture solution via PCIe Mini card, which can easily integrate IP camera for surveillance and real-time video streaming.

QM77 Only

IVCME-C604

Forklift Management

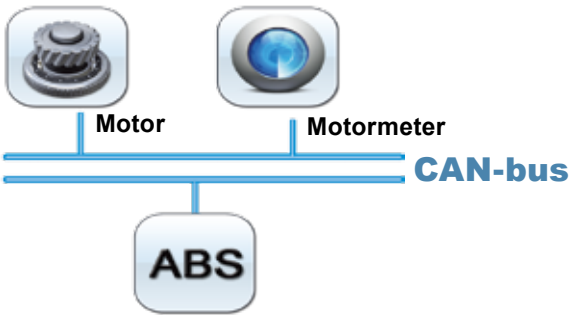
Slaughter House Factory

Flower Market Management

CAN-bus Interface with Isolation

The Control Area Network (CAN) is a serial bus system. The UPC-V312 on-board CAN controllers provide bus arbitration and error detection with automatic transmission repeat function. This drastically reduces the chance of data loss, ensures system reliability, and is suitable for network intelligent I/O devices such as sensors or actuators of machines or plants.

1. Isolated protection voltage 2500V/min DC protection
2. Typical transient immunity 50 kV/ms ESD protection

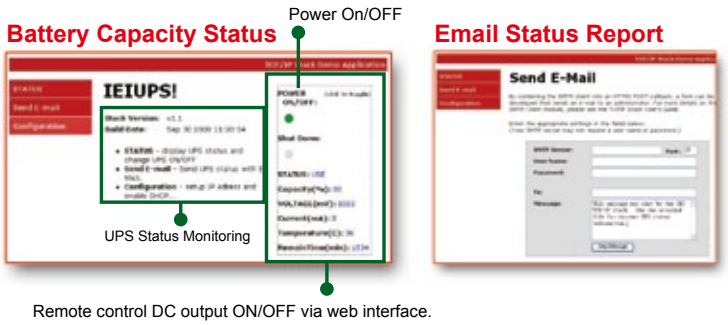


Smart UPS Back Up Power

UPC series products support IEI AUPS products to ensure stable power input.

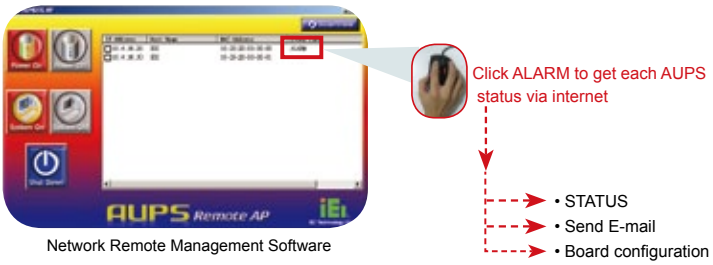
• Network Remote Management Anywhere

• Network Remote Management Software



• Intelligent Software Utility

The remote management software utility and application program allows users to easily get the status of the AUPS and to control the AUPS power functions from anywhere with Internet connection.



AUPS Local USB Utility Tool

Battery Monitoring Utility

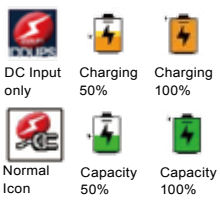
Monitor the Most Critical Battery Functions on the Local Machine

The battery monitoring utility allows AUPS status monitoring and configuration ability. Uninterruptible Power Systems is a significant product that serves as emergency power when you suffer from electric event

Battery Monitoring Utility

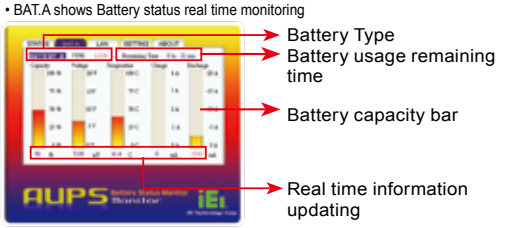
Networking Remote Management

- Battery detection
- Battery capacity status
- Battery charge
- DC Input Indicator
- Battery Indicator
- Temperature warning
- Low battery alarm
- Connection port status



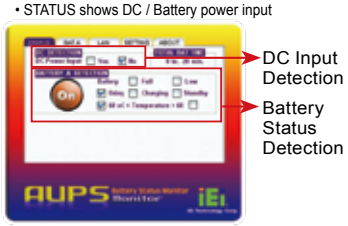
BATTERY STATUS

• BAT.A shows Battery status real time monitoring



AUPS STATUS

• STATUS shows DC / Battery power input

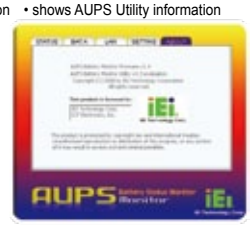


LAN CONFIGURATION

• LAN shows system IP Address information

ABOUT

• shows AUPS Utility information



SETTING

• SETTING shows Connection Detection port

Meanwhile, IEI also provides AUPS API SDK and command list for customer programming under DOS or Linux system

AUPS API Content

Inti()
AUPS Close()
WriteCommand()
ReadCommand()
Error Code Definition()

AUPS API SDK

AUPS API SDK/Content

Specifications

Model		UPC-V315-NM70	UPC-V315-QM77
Display	LCD Size	15 “	15 “
	Max Resolution	1024(W) x 768(H)	1024(W) x 768(H)
	Brightness (cd/m²)	400	400
	Contrast Ratio	700:1	700:1
	LCD Color	16.2M	16.2M
	Pixel Pitch (mm) (HxV)	0.297(H) x 0.297(V)	0.297(H) x 0.297(V)
	Viewing Angle (V/H)	125°/ 140°	125°/ 140°
	Backlight MTBF (hrs)	50000	50000
Touch	Touch Screen	Resistive Type 5-Wire with RS-232 interface	Resistive Type 5-Wire with RS-232 interface
	Touch Controller	DMC 9000	DMC 9000
Motherboard	CPU	Intel® Celeron® Processor 847	Intel® Core™ i7-3517UE Processor Intel® Core™ i3-3217UE Processor
	Chipset	Mobile Intel® NM70 Express Chipset	Mobile Intel® QM77 Express Chipset
	RAM	Buitl-in one 2 GB DDR3 memory (System max. 8GB; on board max. 4GB; socket max. 4GB)	Buitl-in one 2 GB DDR3 memory (System max. 8GB; on board max. 4GB; socket max. 4GB)
	Ethernet	Intel® WG82579LM GbE PHY	Intel® WG82579LM GbE PHY
	Audio Codec	Realtek ALC892 HD audio codec	Realtek ALC892 HD audio codec
I/O Ports and Switches		3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-bus 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB 2.0 1 x Reset button 1 x Audio jack (Line out,MIC) 1 x DC Jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT / ATX mode switch	3 x RS-232 (RJ-45) 1 x RS-422/485 (RJ-45) 1 x CAN-bus 1 x VGA 1 x HDMI port 2 x GbE LAN 2 x USB 2.0 2 x USB 3.0 1 x Reset button 1 x Audio jack (Line out, MIC) 1 x DC Jack (9~36V DC) 1 x Terminal block (9~36V DC) 1 x AT / ATX mode switch
System	Audio	AMP 3W + 3W (Internal Speaker)	AMP 3W + 3W (Internal Speaker)
	Camera	2-megapixel	2-megapixel
Connectivity	Wireless	IEEE 802.11a/b/g/n 3T3R module (WIFI-RT5393-DB-R10) Telec certified	IEEE 802.11a/b/g/n 3T3R module (WIFI-RT5393-DB-R10) Telec certified
	Bluetooth	Bluetooth V2.0+EDR with USB interface (optional)	Bluetooth V2.0+EDR with USB interface (optional)
	3G	Reserved USB connector (Optional)	Reserved USB connector (Optional)
	GPS	N/A	FV-W9U (Optional, internal USB header)
Drive Bay	HDD Driver Bay	1 x 2.5” SATA SSD bay	1 x 2.5” SATA SSD bay
	SSD	mSATA (SATA2 Signal)	mSATA (SATA2 Signal)
	CD-ROM Driver Bay	N/A	N/A
Expansion Slot		N/A	1 x PCIe Mini Card
System Cooling		Fanless	Fanless
Physical	Construction Material	Aluminium alloy	Aluminium alloy
	Mounting	VESA 100mm x100mm or 75mm x 75mm with M8 screws	VESA 100mm x100mm or 75mm x 75mm with M8 screws
	Front Panel Color	Orange (Pantone 15C)	Orange (Pantone 15C)
	Dimensions (WxHxD) (mm)	427.19 x 330.63 x 77.06	427.19 x 330.63 x 77.06
	Net Weight	7.97 kg	7.97 kg
Environment	Operating Temperature	-20°C ~60°C	-20°C ~60°C
	Storage Temperature	-30°C ~70°C	-30°C ~70°C
	Operating Humidity	5% ~90%, non-condensing	5% ~90%, non-condensing
	Shock	Half-sine wave shock 3G; 11ms; 3 shocks per axis	Half-sine wave shock 3G; 11ms; 3 shocks per axis
	Vibration	MIL-STD-810F 514.5C-1 (with SSD)	MIL-STD-810F 514.5C-1 (with SSD)
	IP Rating	Full IP 65	Full IP 65
Power	Adapter	90 W; 63040-010090-020-RS	90 W; 63040-010090-020-RS
	Requirement	Power1: 9V~36V(+/-0.3V) Power2: 10.5V~36V(+/-0.3V)	Power1: 9V~36V(+/-0.3V) Power2: 10.5V~36V(+/-0.3V)

Ordering Information

P/N	Description
UPC-V315-QM77-i7/R/2G-R10	15" 400cd/m² XGA fanless full IP65 panel PC with Mobile Intel® QM77 Express Chipset and Intel® Core™ i7-3517UE Processor, 802.11a/b/g/n wireless module, resistive touch screen, 2-mgeapixel camera, microphone, 2GB DDR3 RAM, R10
UPC-V315-QM77-i3/R/2G-R10	15" 400cd/m² XGA fanless full IP65 panel PC with Mobile Intel® QM77 Express Chipset and Intel® Core™ i3-3217UE Processor, 802.11a/b/g/n wireless module, resistive touch screen, 2-mgeapixel camera, microphone, 2GB DDR3 RAM, R10
UPC-V315-NM70-C/R/2G-R10	15" 400cd/m² XGA fanless full IP65 panel PC with Mobile Intel® NM70 Express Chipset and Intel® Celeron® Processor 847, 802.11a/b/g/n wireless module, resistive touch screen, 2-mgeapixel camera, microphone, 2GB DDR3 RAM, R10

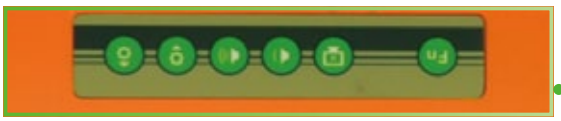
Packing List

Item	P/N	Q'ty
Utility CD		1
One Key Recovery CD		1
IR Remote Controller	7Z000-SLPCB005-RS	1
RJ-45 to DB-9 COM Port Cable	32005-000200-200-RS	4
M8 Screw	44325-080081-RS	8
M4 Screw	44005-040082-RS	8
Mounting Bracket	41003-0433C2-00-RS	2
Screw Driver	45019-001004-00	1
Power Adapter	63040-010065-010-RS	1
Power Cord (European Standard)	32702-000401-100-RS	1
Power Transfer Cord	32702-000300-100-RS	1
M8 to M4 Screw	44300-040061-RS	8

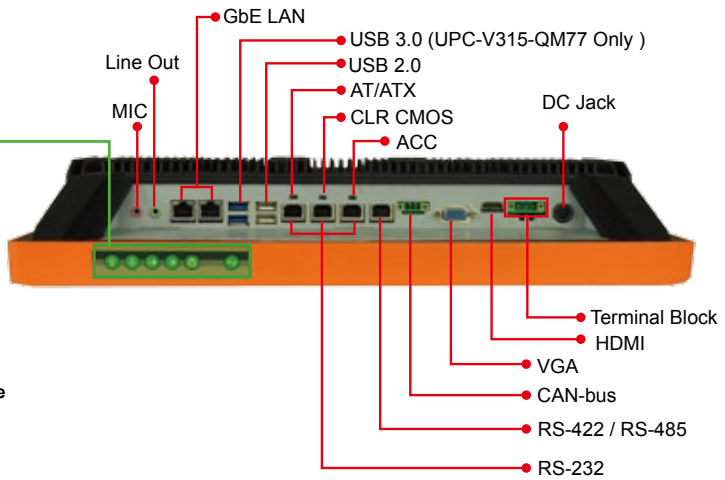
Options

Item	P/N
ARM	ARM-31-RS
Wall Mounting Kit	AFLWK-19B
Stand	STAND-C19-R10/STAND-100/STAND-210
GPS Module Kit	UPC-GPS-KIT01-R10
Bluetooth Module Kit	UPC-BT-KIT01-R10
EM RFID Kit	UPC-EM-RFID-KIT01-R10
Mifare RFID Kit	UPC-MF-RFID-KIT01-R10
OS: Win XPE (CD-ROM)	UPC-V315-XPE-R10
OS: Win 7 Embedded (DVD-ROM)	UPC-V315-W7E-R10

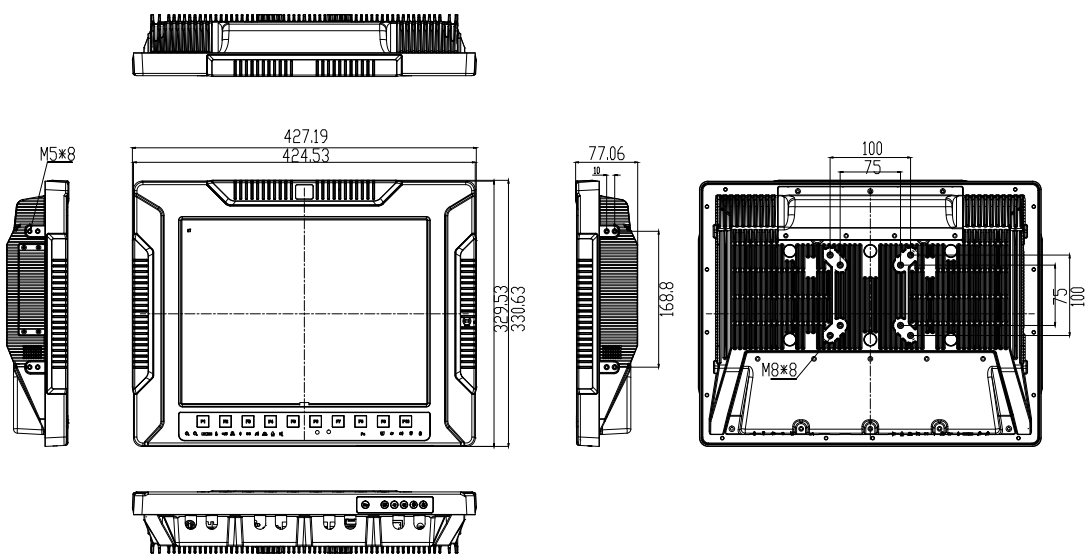
IO and Human Machine Interface



Fn	Fn		
	Backlight On/Off	Fn +	RFID enable / disable
	Audio -	Fn +	Audio mute
	Audio +	Fn +	Camera enable / disable
	Brightness -	Fn +	Right side USB enable / disable
	Brightness +	Fn +	Power on / off



Dimensions (Unit: mm)



UPC-V312-D525

12.1'' Aluminum Rugged Panel PC

Features

- Fully IP 65 compliant with fanless Intel® Atom™ D525 1.8GHz dual-core processor
- 12.1'' 600 nits 1024 x 768 LCD with LED backlight
- TWIN-DC input, 9V ~ 36V and 10.5V ~ 36V, switch automatically
- Dual-band 2.4/5GHz Wi-Fi 802.11 a/b/g/n 3T3R MIMO design
- Reserved space for 3.75G / HSUPA USB module
- Optional GPS receiver
- Optional EM or Mifare RFID reader
- Optional Bluetooth module
- Built-in 2-mgeapixel webcam with AF, AE and AWB capabilities
- CAN-bus interface with isolation
- Robust die-casting aluminum chassis

Specifications

Model Name		UPC-V312-D525-R11
Display	LCD Size	12.1"
	Max Resolution	1024(W) x 768(H)
	Brightness (cd/m²)	600
	Contrast Ratio	700:1
	LCD Color	16.2M
	Pixel Pitch (mm) (HxV)	0.24(H) x 0.24(V)
	Viewing Angle (V/H)	150° / 130°
	Backlight MTBF (hrs)	50000
Touch	Touch Screen	Resistive Type 5-Wire with RS-232 interface
	Touch Controller	DMC 9000
Motherboard	SBC	UPCMB-V312-D525-R10
	CPU	Intel® Atom™ D525 1.8GHz dual-core processor
	Chipset	Intel® ICH8M
	RAM	On-board 2GB DDR3 SO-DIMM (System Max. 2GB)
	Ethernet	Realtek RTL8111CP PCIe GbE controller
	Audio Codec	Realtek ALC888 audio codec
I/O Ports and Switches		RS-422/485 (4-pin box header) RS-232 (DB-9 connector) CAN-bus (3-pin terminal block) GbE LAN (RJ-45 connector) 4 x USB connector Audio jack (Line-out, Mic) VGA port (DB-15 connector DC-IN 1 (terminal block) / DC-IN 2 (DC jack) Reset button AT/ATX switch
Connectivity	Wireless	IEEE 802.11a/b/g/n 3T3R module (WIFI-RT5393-DB-R10) Telec certified
	Bluetooth	Bluetooth V2.0+EDR with USB interface (optional)
	3G	Reserved USB connector (Optional)
Driver Bay	SSD	CF Type II / mSATA (SATA2 Signal)
Physical	Front Panel Contruction	Aluminum Die-Casting
	Chassis Construction	Extruded Aluminum Alloy
	Mounting	VESA 100mm x 100mm and 75mm x 75mm with M8 screws
	Front Panel Color	Orange (Pantone 151C)
	Dimensions (WxHxD) (mm)	338.5 x 276.25 x 62.86
	Cut Out Dimensions (WxH) (mm)	338.5 x 276.25
	Net / Gross Weight	4.5 kg/ 6.8 kg
Expansion Slot		PCIe Mini slot for Wi-Fi
		PCIe Mini slot
System Cooling		Fanless
Environment	Operating Temperature	-20°C~60°C
	Storage Temperature	-40°C~85°C
	Vibration	MIL-STD-810F 514.5C-2 (with CF card or SSD)
	Shock	Half-sine wave shock 3G; 11ms; 3 shocks per axis
	IP Level	Full IP 65
	Safety & EMC	CE / FCC
Power	Adapter	65W power adapter (Meet PSE)
		Input: 90VAC~264VAC, 50/60Hz; Output: 19V DC
	Requirement	Power 1: 9 (+/-0.3)~36V
		Power 2: 10.5 (+/-0.3)~36V
	Consumption	52W

Ordering Information

Part No.	Description
UPC-V312-D525/R/2G-R12	12.1" 600cd/m² XGA fanless full IP 65 panel PC with Intel® Atom™ D525 dual core 1.8GHz,802.11a/b/g/n wireless module, resistive touch screen, 2-megapixel camera, microphone, 2GB DDR3 RAM, R12

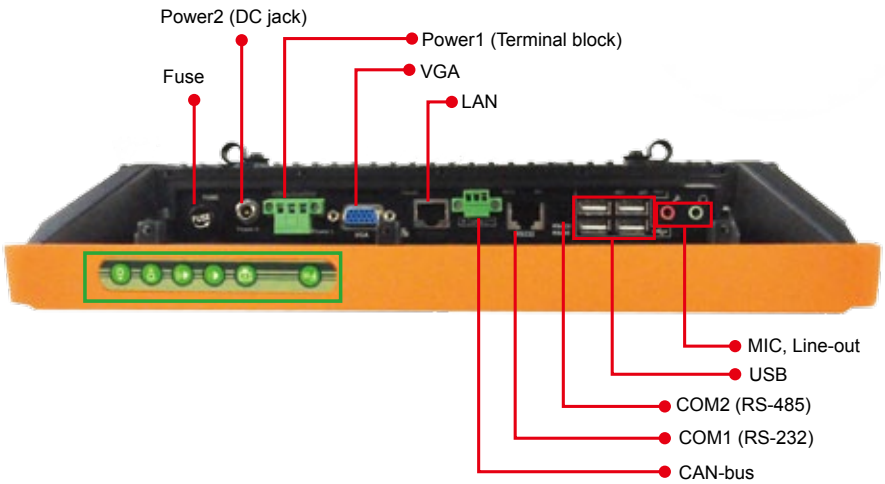
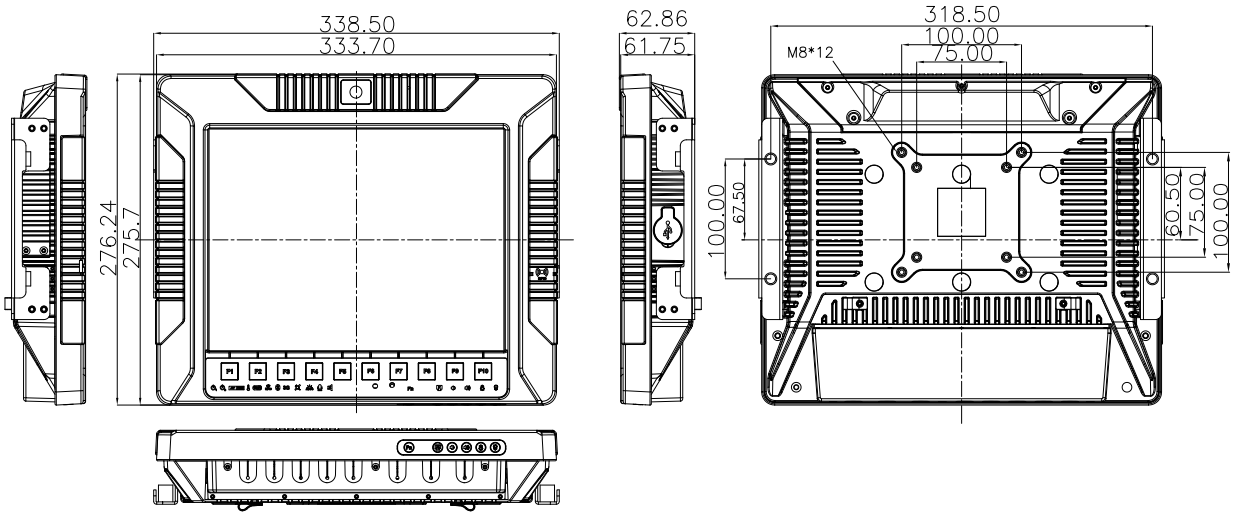
Options

Item	P/N
ARM	ARM-11-RS/ARM-31-RS
Wall Mounting Kit	AFLWK-19B/ AFLWK-12
Stand	STAND-A19-RS/STAND-A21-R10/STAND-210-R11
GPS Module Kit	UPC-GPS-KIT01-R10
Bluetooth Module Kit	UPC-BT-KIT01-R11
EM RFID Kit	UPC-EM-RFID-KIT01-R10
MiFARE RFID Kit	UPC-MF-RFID-KIT01-R10
OS: Win CE 6.0 (128MB CF Card)	UPCCF-V312-D525-CE060-128M-R10
OS: Win XPE (4GB CF Card)	UPCCF-V312-D525-XPE-4G-R10
OS: Win 7 Embedded (4GB CF Card)	UPCCF-V312-D525-WES7E-4G-R10

Packing List

Item	P/N	Q'ty
Utility CD	7B000-000741-RS	1
One Key Recovery CD		1
IR Remote Controller	7Z000-SLPCB005-RS	1
RJ-45 to DB-9 COM Port Cable	32005-000200-200-RS	1
M8 Screw	44325-080081-RS	8
M4 Screw	44005-040082-RS	8
Mounting Bracket	41003-0382C2-00-RS	2
Screw Driver	45019-001004-00	1
Power Adapter	63040-010065-010-RS	1
Power Cord (European Standard)	32702-000401-100-RS	1
RS-422 Cable	32205-002400-100-RS	1
Power Transfer Cord	32702-000300-100-RS	1
M8 to M4 Screw	44300-040061-RS	8

I/O Interface



UPC-V312 Dimensions (Unit: mm)